Population and Society in Contemporary TIBET

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Foreword

As China began to open its doors to the West in the early 1980s, the United States and China began a formal bilateral program of academic and educational exchange. Professor Rong Ma and I were among the early beneficiaries of this new opportunity. I was able to start anthropological field research in Tibet (the Tibet Autonomous Region of China) and Rong Ma was able to begin M.A. and Ph.D. studies in Sociology and Population at Brown University. Dr. Ma completed his Ph.D. and returned to Beijing in 1987, joining the faculty at Peking University. Since then, Professor Ma has become the preeminent social scientist studying ethnic minorities, particularly Tibetans, in China. Not only has he trained many young Han and Minority nationality scholars in his role as Professor in Peking University's Department of Sociology and Institute of Sociology and Anthropology, but he has organized and implemented the most important sociological surveys on life in Tibet.

Dr. Ma understood that a major cause of the wildly opposing representations of Tibet was a glaring dearth of in depth, accurate, scientific data about the lives of Tibetans following China's extraordinary modernization under Deng Xiaoping. After his return to Beijing, therefore, he immediately set out to fill this gap by planning and carrying out a large-scale quantitative research survey on the social, economic and demographic situation in Tibet. That project, which started in 1988, focused on a large representative sample of over 1,300 households from the three main political, economic and population centers in the TAR — Lhasa, Shigatse and Lhoka prefectures. The data from this and subsequent fieldwork-based projects cover a range of important topics such as income, migration, fertility, mortality, education, age structure, population growth and so forth, and form the basis of *Population and Society in Contemporary Tibet*.

Professor Ma's monograph also integrates other important quantitative data from Chinese government sources such as censuses and local and prefectural records. It is the first sociological/demographic monograph on Tibet by a major Chinese scholar using the best international methods of data collection and analysis.

The field of Modern Tibetan Studies has for years sorely needed a monograph that would pull together the voluminous quantitative data extant in China on Tibetan society and population, and now, as a result of Professor Ma's research, the wait is over. This monograph, for the first time, will provide Western students and scholars access to a corpus of data heretofore not available. *Population and Society in Contemporary Tibet,* therefore, is a most welcome addition to the growing scientific literature on Tibet and a new window into a vast corpus of Chinese data and academic analysis on Tibet.

Melvyn Goldstein
Cleveland, Ohio, U.S.A.

Acknowledgments

As a child I dreamed of visiting Tibet, a mysterious land with a unique landscape, culture, and religion. Only when I started teaching at Peking University in 1987 did that dream become a reality. I was involved in a cooperative research project supported by the Institute of Sociology and Anthropology at Peking University and the China Tibetology Research Center. Therefore, I particularly thank two founders of these two institutes, Professor Fei Xiaotong and Professor Dorje Tseden, for their full support of this project. They are both senior scholars with great knowledge and wisdom, and personally experienced the dramatic historical changes in China in the twentieth century. I thank them not only for their support of this project, but also for their advice and guidance in understanding the social transition in China and Tibet. The core part of the survey data in this book is from the 1988 questionnaire survey in the Tibet Autonomous Region. The third person I must thank for supporting this survey was Mr. Wu Jinghua, who served as Party Secretary of the TAR at that time. Without his assistance and arrangement, the project could not have been completed successfully.

I am also grateful to my friend Tanzen Lhundup for his help and cooperation for 23 years, since he became my assistant in the 1988 survey. As a native Tibetan, his language capacity, knowledge of Tibetan culture and history, as well as his social networks in local institutions and academic circles in Tibet, provided the valuable help that I could not obtain otherwise. He studied at Peking University during 1997–2001 for his doctoral degree, and was the key leader in our 2005 and 2008 temporary migration surveys in the TAR.

I will not mention the names of all my friends and students who participated in the 1988, 2005, and 2008 surveys in the TAR, or the local Tibetans who responded to our surveys, but I must emphasize that the surveys could not have been done without their participation and contribution, which I greatly appreciate.

A number of prominent scholars have offered many insightful suggestions to improve and publish this manuscript in English. They include Dr. Mary O'Hara

Devereaux, Director of the Institute for the Future; Professor Mark Selden at Cornell University; Professor Tom Grunfeld at Empire State College of the State University of New York, who has known me for about 27 years; and Professor James Lee at the University of Michigan who provided many insightful suggestions. I am deeply grateful to all of them.

I am also much indebted to Professor Melvyn Goldstein, whom I first met at Case Western Reserve University in 1991. His publications are a most valuable resource on the history of Tibet. After he realized that I was working on this book in English, he encouraged me to publish it and later very generously wrote a Foreword.

Finally, I express my thanks to Professor Gerard Postiglione at the University of Hong Kong, who contacted Hong Kong University Press and provided his support for publication. In the process of peer review, I learned a lot from the questions and comments of the reviewer who is very knowledgeable in Tibetan studies. I am grateful to Dr. Colin Day and Mr. Michael Duckworth at Hong Kong University Press who had this project approved for publication.

Since my mother tongue is not English, the manuscript needed heavy editing work. Mr. Dennis Cheung, the managing editor of Hong Kong University Press, devoted several months to editing this manuscript. Without his contribution, the manuscript would not have become the book that now appears.

Some information in this book, such as official statistics and exclusive survey data, has not been systematically introduced and analyzed before. Hopefully that will make the book a useful supplement to other publications in Tibetan studies.

1

Introduction

Tibet has become a symbol of heaven on Earth in the Western imagination, the Shangri-La in clouds at the top of the Himalayas. Steeped in the mysterious religion of Tibetan Buddhism, it is a land of peace, harmony and compassion with no concern for money or material things. This is the image of Tibet in the West (Klieger, 2006: 215), where industrialization and modernization have led to political stability, economic prosperity, technical advantage and social welfare, but have also caused severe competition, work pressure, social stratification, income disparity and racial and ethnic tensions, as well as high rates of divorce and crime. It should also be noted that although Tibet seems idyllic to those Westerners who dream about it, few of them really want to live there.

But that is not the whole picture of Tibet. Many people do not know that before the 1950s there was no wheeled transportation in Tibet. Neither were there bridges over rivers, machinery, electricity or modern schools (Karan, 1976: 50).[1] Its economy was primitive and could hardly support its population, which consisted largely of monks. Like Europe in the Middle Ages, the monasteries and clergy dominated the administration, judicature, education and taxation. There was a serf system in Tibet and slavery, which, far from contradicting Tibetan Buddhism, was actually based on it. According to the Chinese government, these systems were backward and brutal and led to much suffering. Little of this was known to Westerners because few of them had visited Tibet before the 1950s.

The Tibet of yore was neither the paradise of Western imagination nor the hell of Chinese propaganda. Both descriptions formed just part of the picture. There are also two sides to the story concerning present-day Tibet under Chinese Communist Party control. The Tibetans in exile say their religion has been destroyed, their language and traditional culture are in danger of disappearing and Tibetans have become minorities because of huge Han Chinese immigration. Now Tibet is a hell under Chinese domination (Jetsun Pema, 1997). The Chinese government, however, paints a different picture of Tibet: because of social reform in the late 1950s, the serf

system was abandoned and a million serfs and slaves were granted land and their freedom; government investment improved infrastructure and raised the standard of living; schools and healthcare systems were modernized; and people enjoy autonomy and religious freedom. Reports from Westerners who have visited Tibet recently present positive and negative views and are sometimes biased. Among the literature in English, some reports have described positively the liberation of the serfs and the tremendous social, economic and educational developments in the region (Karan, 1976; Bista, 1979; Epstein, 1983; Grunfeld, 1987: 164–175). Other reports speak of "forced assimilation" and a disaster for traditional Tibetan religion and culture as a consequence of the Cultural Revolution (Dreyer, 1976: 170; Avedon, 1984: 288–293; Goldstein and Beall, 1990: 140–144).

What is the truth about Tibet? Is it hell or heaven, or somewhere in between? As a Chinese citizen and a sociologist trained at an American university, I have access to information from both sides. I grew up in Beijing and during the Cultural Revolution spent five years in Inner Mongolia as a sheep herder in a nomad Mongol community. In the early 1980s, when Deng Xiaoping opened China to the world, I was lucky to receive a fellowship from the United Nations to study at Brown University in the US for a doctoral degree in sociology. My major was population studies and my minor was urban studies. The theories and methodology I learned at Brown were the foundation of my academic career. Puzzled by the opposing views of Tibet, I became interested in finding the reality and started my own survey there after returning to Beijing in 1987.

I believe that data obtained through a carefully designed sociological survey will offer a new perspective on the lives of Tibetans and present structure of Tibetan society. Many previous studies on Tibet have been based mainly on information provided by Tibetans in exile and the observations of short-term visitors there. Some western scholars have been able to carry out field research in small communities, but none of those studies has provided a quantitative analysis based on large-scale sociological sampling surveys. That was what I intended to do. It is almost impossible for western scholars to conduct region-wide questionnaire surveys in Tibet because of strict restrictions imposed by the Chinese government, which is afraid of negative reports coming from the surveys that would damage its image in the West. And in the 1980s Chinese scholars allowed to carry out surveys lack the necessary academic training and methodology; moreover many of them are not familiar with Western literature in the social sciences. Increasing numbers of Chinese scholars are returning to China with degrees from western universities but few are interested in Tibet. I have been lucky to have worked for 20 years with Tanzen Lhunduo, a Tibetan scholar at the China Tibetology Research Center and my research assistant during my 1988 survey in Tibet. For these reasons, I believe I have some advantages in Tibetan studies.

There have been considerable debates about the sensitive issue of political relations throughout history between Tibet and China, and this is the first subject raised when people in the West talk about Tibet. Because I am not a historian and Tibetan history is not my specialty it will not be the focus of this book. Based on systematic studies of historical materials and intensive interviews, these debates were summarized in Melvyn Goldstein's book *The Snow Lion and the Dragon* (1997), which provides an insightful description of the history of relations between Tibet and China. Christiaan Klieger's article "Riding High on the Manchurian Dream: Three Paradigms in the Construction of the Tibetan Question" has an excellent review of the interpretations of the historical relationship between Chinese dynasties and Tibet by the Chinese authority and Tibetans in exile (Klieger, 2006). These two works provide balanced material and discussions about the history of Tibet and I recommend them to readers.

The Focus of This Book

The aim of this book is to present and analyze demographic data and economic statistics as well as the changes in the past five decades in Tibet. To obtain reliable first-hand data I organized a sociological sampling survey in 1988 in three main regions of the Tibet Autonomous Region (TAR).[2] I believe it was the first such survey in Tibet. After that, I organized a series of social-research projects in Tibet in the fields of poverty, education and migration. The latest two surveys were conducted in 2005 and 2008 on temporary migration in Lhasa and other towns in the TAR (Ma Rong and Tanzen Lhunduo, 2006).[3] I continue to examine all the TAR's census and official statistical data, which became available only after 1989, the year the first volume of the TAR's statistical yearbook was published.

To understand the whole picture and try to evaluate the accounts and criticism from both sides, several key issues become my main concern. I drew these from hot topics in international debates and tried to include them in the framework of my questionnaire. Since the Dalai Lama and his followers fled to India in 1959, many social and economic changes have taken place in Tibet. The main criticisms of China's policy in Tibet are: (1) Han immigrants now outnumber local Tibetans; (2) Tibet is exploited economically by the Han regions; (3) religious activities are forbidden in Tibet; (4) Tibetan language and traditional culture are being threatened and restricted by government policies; (5) autonomy in Tibet is not genuine because the Han Chinese dominate the TAR government; (6) the Tibetan population is declining because of the family-planning program, etc. (Pay, 1975: 497; *Asia Watch* Report, May 1988, February 1992; the reports of *Amnesty International*, 1992; Jetsun Pema, 1997). The Chinese government has also focused on these issues in response to criticism from Tibetans in exile and the West. These issues cover broad

areas of the social sciences and humanities and cannot be tackled through just one research project. That's why I selected only those issues that can be studied through quantitative studies based on available demographic and statistical data related to these topics.

Because there are other ethnic groups living in Tibetans' traditional areas, for the sake of simplicity my study concentrated on the TAR, the "political" Tibet, not the "ethnic" Tibet.

Western anthropologists such as Melvyn Goldstein, Cynthia Beall, Nancy Levine and Graham Clarke, among others, have carried out field surveys in Tibetan areas since the 1980s. Most of their studies have been case studies. Very few studies by western and Chinese scholars have systematically analyzed statistical and census data. Andrew Fischer's book *State Growth and Social Exclusion in Tibet (2005)* is the only one I know of that has used official statistics to analyze economic patterns in Tibet. In recent years Chinese scholars (including those from Han, Tibetan and other ethnic groups) have studied marriage, family, education, population change, agriculture, etc. in Tibet. Most of these studies have been descriptive. There have been only a few questionnaire surveys conducted in Tibet by Chinese scholars, and these have been limited in geographical scope and topic coverage. This convinced me that sociological studies of survey data combined with statistical and census data, supplemented by other research reports, might help in understanding Tibet's present demographic and social situation better.

Tibetan Studies at Peking University and the 1988 Survey

The 1988 survey was part of a national research project carried out at the Institute of Sociology and Anthropology (ISA) at Peking University. Since it was established in 1985, the ISA has paid special attention to studies of social development in China's frontier and minority regions under the guidance of its founder, Professor Fei Xiaotong.[4] To conduct these projects the ISA organized a series of systematic in-depth field research activities in the major ethnic minority areas of China: Inner Mongolia Autonomous Region, Xinjiang Uygur Autonomous Region, Tibet Autonomous Region, Ningxia Hui Autonomous Region and minority areas of Qinghai, Gansu, Yunnan, Hunan and other provinces.

Following my suggestion, Professor Fei Xiaotong and Mr. Dorji Tseden, Director of the China Tibetology Research Center (CTRC) and the former Chair of the TAR, discussed this TAR research project in 1987. The CTRC provided a grant to support the project. Then an ISA-CTRC joint research team was formed. I served as project coordinator and led the team. This survey was also supported by Mr. Wu Jinghua, the CCP secretary of the TAR in the late 1980s, who gave the green light to our survey and provided local assistance. Therefore, my Tibet study received the

necessary support from three important figures. In summer 1988 the research team traveled to the TAR to conduct household interviews. This project can be divided into four periods:

The period of preparation

In preparing the sampling procedure for the household interviews, I analyzed the social, economic, educational and demographic changes in the TAR and other Tibetan areas based on statistical and census data at the national and regional level (Ma and Pan, 1988a). These data helped us to learn the basic structure and characteristics of the Tibetan population and society: geographic distribution, age and gender structure, educational structure, industrial and occupational distribution of labor force, land and domestic animal distribution, income and consumption of rural and urban residents recorded by local statistical bureaus, etc. In addition, I also referred to research on Tibetan history, population, social organization, religion, culture, education, trade and production in the Chinese and English languages to obtain more useful information.

Designing the questionnaire

In household interviews a standard questionnaire, in Chinese or Tibetan, was used, according to the local situation. The questionnaire was designed to obtain basic information about all the household members on their age, gender, ethnic status, educational achievement, occupation, relationship to the head of the household and residential registration status. It also included questions about the basic economic situation of the respondent household: its annual income and expenses in 1987 (the year before the survey), housing and other durable consumer goods, arable land, pasture and animals. These items were considered as household property that did not belong to individual members.

Apart from the above, the questionnaire also compiled important individual information about the head of each household, such as his/her occupational changes, marital history, childbearing history, language capacity, migratory history, travel experiences, participation in religious activities, etc. The questionnaire included more than 130 questions in nine categories. Originally, I tried to ask the respondents about their attitude toward the Dalai Lama, but that question was removed because of opposition from the TAR government officers. In general, we expected the information and data obtained from the questionnaire interviews to provide a basic picture of the family, work and daily life of rural and urban Tibetans.

Sampling and household interviews

Based on analyses of the macro-level data, I decided to conduct household interview surveys that focused on three of the TAR's seven prefectures: Lhasa, Shigatse and Lhoka.[5] These three regions are the political, economic and population centers of the TAR.

I understand very well that a scientifically designed sampling procedure is the most essential step in collecting good-quality data. To obtain necessary basic information for sample designing and to conduct the interviews accordingly, the team went to Tibet twice in 1988. During the first trip we visited relevant government institutions and collected statistical data from the statistical bureaus at the TAR and prefectural levels. To ensure that the household interviews could be carried out successfully, the team also visited the capital towns of three prefectures and several counties (Lhasa, Chushur, Shigatse, Sakya, Gynatse, Yatung, Nedong). From the statistical bureaus of prefectures, we received all basic demographic and economic records at village level. The population data of each county can be double checked with 1982 census data. From prefectural statistics bureaus, detailed demographic and statistical data in 1987 for all 437 *xiang*[6] in three prefectures were systematically collected for the sampling procedure. We were lucky that those data were recently collected in all counties of the TAR to adjust administrative units from the previous district-commune system to a *xiang* system following the system reform in the rural TAR in the early 1980s. The data we obtained in the summer of 1988 were updated and are relatively accurate.

The method used in the sampling was "stratified multistage probabilities proportional to size." The three indicators used to select *xiang* were: (1) cultivated land per capita in 1987, (2) animals per capita in 1987 and (3) net annual income per capita in 1987. These three were calculated at *xiang* level and could be used as a measurement of unit stratification among all *xiang*. In the first step a total of 437 *xiang* (townships) were classified by these variables to select 50 sample *xiang*. They represent five groups of communities: upper (rich communities), upper-middle, middle, low-middle, and low (poor communities). In the second step, two to four villages were selected for each sample *xiang*, according to their population size. The plan was to interview 50 households in each selected *xiang*. If the village had a small population (e.g. only 10 to 15 households in one village), then four villages would be selected. Under China's rural residential registration system, all households (including those in the TAR, where relatives usually prefer to live next to each other) were recorded along with the location of their houses. In the third step, about 50 households were selected from residential registration lists of sample villages by the method of equidistance. In other words, the households were selected from village residential registration lists in a particular order (e.g. every four or five households in registration lists, say numbers 1, 5, 9, 13, 17 . . .

were chosen).[7] In our survey experiences in Inner Mongolia, Xinjiang and other provinces, the equidistance sampling method was an appropriate way to pick respondents in villages or urban neighborhoods.

Considering the geographic distribution of those selected villages in an area of about one million square kilometers, the transportation difficulties and language barrier (some of our team members could not speak Tibetan), we decided that household interviews in rural areas would be carried out by local interviewers, not directly by the team members. In fall 1988, during our second visit to Tibet, we organized two training programs in Lhasa for local interviewers. We asked the selected county governments to identify the local interviewers (two to three from each county) for us and send them to Lhasa to participate in this training program. The ideal composition of county survey teams was three interviewers, one from the county government (usually an officer from a county statistical bureau) and two from selected *xiang* (the statistical assistant or deputy *xiang* leader). The questionnaires for rural areas were printed in Tibetan.

During the training program, these interviewers learned to understand the questions and the coding methods. At the end of the training program, all interviewers had to fill out a questionnaire under the guidance of a team member to make sure they understood the questions and proper way to fill out the questionnaire. To control the quality of the answers we insisted that all questionnaires should be filled out by the interviewers, not by respondents themselves. Those interviewers who were recommended by county governments also took with them to Lhasa the residential registration profiles of selected villages. Our team members from Beijing could then do the sampling by household. The household interviews were thus conducted by these newly trained interviewers according to the predetermined list of sampled households.

Apart from the rural household interviews, the research team selected Lhasa as the site for urban-household canvasses. By studying Lhasa we hoped to learn more about the capital city of the TAR and also planned a comparative study between the urban and rural respondents. We faced some difficulties in sampling in urban Lhasa.

The administration and management of urban residents in China is organized into a hierarchy of "urban district," "street office," "residential committee" and "household." The residents in urban Lhasa under the residential committees were placed into two categories: "residential households" and "unit households."[8] Previously all urban workers in state-owned units were government employees. Those who worked in the urban collective sectors were not classified officially as government employees although, where welfare, health care, etc. were concerned, their situation was not unlike that of government employees. Most members of the state-owned units and a large proportion of employees under collective units are registered under their "unit households."

In the profiles of the "unit households" we discovered that the household registration cards (every person in China must be registered with the local authorities at their place of residence; a registration card is the essential record of legal status of a household) in Lhasa were classified by individuals, not by household. In the records of these unit households, individual government employees and their dependents were distinguished by different colored registration cards. The red cards (employees) and blue cards (dependents) were filed separately. Although each person (employee or dependent) had his/her individual card there was no way of tracing their relationships (husband and wife, father and son, etc.). Because "family households" could not be identified within unit households, the family household sampling method could not be applied to unit households in Lhasa.

Faced with this dilemma we decided to exclude unit households from our study and focus our interviews on the urban residential households in four street offices (Barkor, Kyire, Tromsig Khang and Jebum Gang) in the old urban area of Lhasa. Because native Tibetan residents were concentrated in the old urban area, our samples in Lhasa would represent their situation and that was an important part of our survey. The sampled households were selected by equidistance in the list of the households under residential committees. The household interviews were conducted by our research team members with the assistance of colleagues at the Academy of Social Sciences of Tibet and the Department of Tibetan Literature at Tibet University. I personally interviewed about 70 urban households in Lhasa with my assistant Tanzen Lhundup, who became a Ph.D. student at Peking University under my guidance in the late 1990s.

The rural and urban household interviews took several months to complete. The filled questionnaires were collected, examined and coded in Lhasa. All information and data were put into a computer data file after the team returned to Beijing. The total number of collected questionnaires covered 1,312 households, 644 households from urban Lhasa and 668 households from rural areas. We did not reach our original goal of 2,500 households, firstly because owing to floods, 21 *xiang* failed to send interviewers to Lhasa for the training program; the team trained interviewers from 29 *xiang* only. Secondly, the trained interviewers from six *xiang* did not conduct the interviews because their jobs changed after they returned to their home counties. Among the 29 sample *xiang,* only 23 actually conducted household interviews. Considering the low population density, poor transportation conditions and loose administration in rural Tibet, especially in some remote areas, the results of rural interviews were considered acceptable.

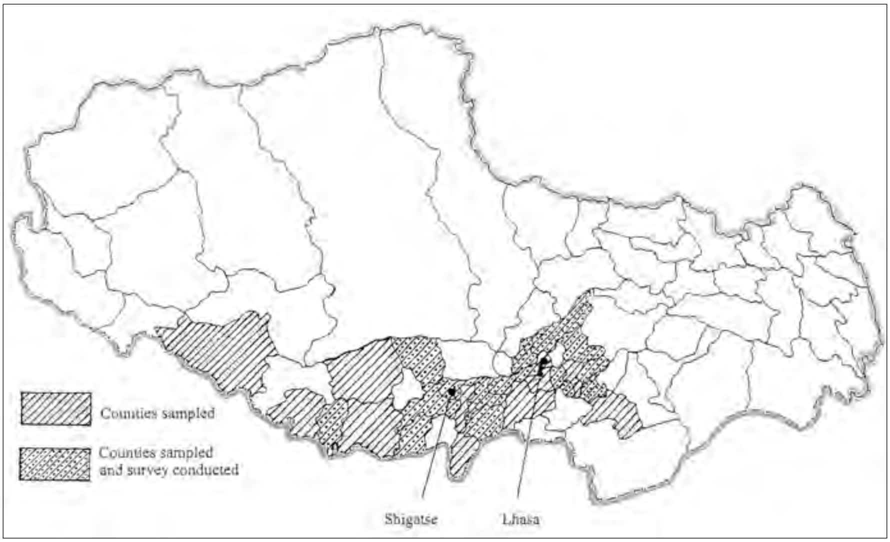


Figure 1.1. The Locations of Sampled Counties in Three Prefectures

Studies of selected issues

There were several key issues that we thought very important in understanding the general social and economic changes in Tibet. These issues were studied in terms of individual interviews or small-circle meetings with some Tibetan residents, scholars, senior monks, university students and local officials in Lhasa and other towns.

During household interviews in Lhasa from August to October 1988, the team selected five specific topics to study. They were: (a) housing in Lhasa, (b) unemployment among Tibetan youth in Lhasa, (c) market prices and inflation in Lhasa, (d) temporary migrants in Lhasa, and (e) the rotation system of Han government employees in the TAR. Some of our findings had an impact on social changes in the TAR. For example, one month after our report on housing in Lhasa was submitted to the United Front Department of the Chinese Communist Party (CCP), Yan Mingfu, the chief of the United Front Department, visited Lhasa to investigate the housing situation. Our report had described a serious discrepancy in housing between high-rank officers and poor Tibetan residents. As a result of his investigation we learned that in the following year the central government in Beijing allocated 25 million yuan to improve housing in old urban areas of Lhasa.

After the 1988 survey, the team members continued to conduct community and issue studies in different parts of the TAR. The issues studied included: the development and problems of manufacturing in Tibet, the production and management of handicrafts in Tibet, housing in Lhasa and other towns, school

education in rural and urban areas in the TAR, the development projects of "Three Rivers Valley", migration into the TAR, etc. The major reports were published in 1996 as *Development Studies of Tibetan Society* (ISA and CTRC, eds.). One recent research project conducted in the TAR was the 2005 survey of temporary migrants in Lhasa City, in which 1,470 temporary migrant laborers in urban Lhasa were interviewed. A sampling procedure was carefully designed to cover major occupation groups of those temporary migrants (Ma Rong and Tanzen Lhundup, 2006). Because the same questionnaire was used in five other western Chinese cities (Urumqi, Hohhot, Yinchuan, Lanzhou, Xining and Gormo), a comparative study was made among these six cities based on the questionnaire interview data of a total of 12,239 individual migrants (Ma Rong and Ma Xuefeng, 2007).

The "Diffusion-Internal Colonialism" Framework

To analyze different aspects of the data and put them together to represent a social structure and its functions, a theoretical framework was necessary to guide our quantitative analyses. Because Tibet has its own history and cultural traditions, and has been relatively isolated from the outside world for a long time, its society and social changes must have unique characteristics. Therefore we should look beyond the common demographic and sociological approaches, such as demographic transition, urbanization, social stratification, modernization, etc, to study Tibet. Because the Chinese central government has been an important factor in Tibet since the 1950s, the relationships and interactions between Tibet and other regions of China have played a key role in the social, economic and cultural changes in Tibet. Our study casts data analysis under such a political background.

In studying the interactions between a core area and peripheral regions in the process of nation-building and national development, Michael Hechter proposed a two-model theory. The first was the "diffusion model' of national development. The second was "internal colonialism." The two models represent two different approaches of the dominating group in the core area towards minority groups in the peripheries. The assumption behind those models is that at the beginning there were only limited political, economic and cultural contacts between the core area and peripheral regions, but that those contacts increased significantly following social development. This situation is very similar to the relationship between Tibet and Han Regions of China.

According to Hechter, the diffusion model process can be divided into three stages.

> The first stage is pre-industrial . . . The core and peripheral regions exist in virtual isolation from one another. Events in the core have but

> slight influence in the periphery. The second stage occurs after the initiation of more intensive contact between the core and peripheral regions . . . the type of social structure founded in the developing core regions will, after some time, diffuse into the periphery . . . initial regional differences become muted following industrialization. At the last stage, the core and peripheral regions will tend to become culturally homogeneous because the economic, cultural and political foundations for separate ethnic identification disappear . . . regional wealth should equilibrate; cultural differences should cease to be socially meaningful; and political processes will occur within a framework of national parties, with luck, in a democratic setting, thereby insuring representation to all significant groups. (Hechter, 1975: 7–8)

The characteristics of the first stage of the "diffusion model" are similar to those of the relations between Tibet and central China before the 1950s. Based on Chinese government reports about development in Tibet, Tibet is going through the second stage and will eventually reach the third stage. Therefore, the diffusion model fits very well, according to the Chinese government's line.

In the "internal colonialism model",

> the core is seen to dominate the periphery politically and to exploit it materially . . . The superordinate group, or core, seeks to stabilize and monopolize its advantages through policies aiming at the institutionalization of the existing stratification system. It attempts to regulate the allocation of social roles such that those roles commonly defined as having high prestige are reserved for its members. Conversely, individuals from the less advanced group are denied access to these roles. This stratification system, which may be termed a cultural division of labor, contributes to the development of distinctive ethnic identification in the two groups. Whereas the core is characterized by a diversified industrial structure, the pattern of development in the periphery is dependent, and complementary to that in the core. Peripheral industrialization, if it occurs at all, is highly specialized and geared for export . . . the disadvantaged group will, in time, reactively assert its own culture as equal or superior to that of the relatively advantaged core. This may help it conceive of itself as a separate 'nation' and seek independence. (Hechter, 1976: 9)

It seems to me that the above description of internal colonialism may fit the line taken by the Tibetans in exile and western critics.

This two-model approach provides a useful theoretical framework for this study in guiding data analyses and interpretations. Michael Hechter applied these models to study the relationship between the Celt periphery and British core area

from 1536 to 1966. Other scholars have used a similar framework to study relations between majority and minority regions in national developments in Latin America and Europe. All those studies provide insightful information and references for our Tibet case, as well as a comparative study. I have tried to follow this theoretical framework in this book, especially in Chapter 6 for the analysis of economic relations between the TAR and other parts of China.

The Data of This Study

The data and information used in this book come mainly from the following sources:

1. Statistical data released by the government, including national and regional statistical yearbooks, census data, population yearbooks and local statistical reports. These are the only sources of extensive and longitudinal statistical data, and they provide a basis for comparison with the findings of our survey data. Those data have been widely used by the United Nations, the World Bank and other international organizations to analyze and predict the country's future. Like all data sets, of course, these have their limitations in terms of size and content of items and accuracy. As one scholar argues, "Regardless of their accuracy, the official data are the only sources available capable of providing an overview of the macro society and economy, particularly the non-household sectors, i.e. the government and corporate sectors . . . the official data carry considerable importance in policy making, just as inaccurate census, survey and GDP data in the West carry similar importance (Fischer, 2005: 7)."

   Therefore, even when the absolute numbers are not very accurate, the basic trends (increase or decrease, relative references in cross-sectional and longitudinal comparisons) that emerge are probably indicative. Because the statistical data are published annually, the data for successive years have to follow data from previous years. Otherwise the whole system would appear to be inconsistent and would lead to considerable public questioning. It is almost impossible for any artificial adjustment of these statistical data because that would cause a systematical change from the village to national levels. Even if someone wanted to adjust the data because they were worried about the negative impact of national-level statistics, they wouldn't be able to do it because local statistical yearbooks would already have been published. In general, the Chinese census data have been accepted by scholars and international experts because of their importance in indicating the macro structure of the Chinese economy and society.

2. Chinese-language research literature (books, articles, reports, etc.) on Tibet, including articles published in several major journals such as *Tibetan Studies* (Academy of Social Sciences of the TAR), *Tibetology in China* (The China Tibetology Research Center), *Tibet in China,* and *Education in Tibet*. Our review of literature refers also to other publications, such as *Series of Tibetan Studies* and *Translation Series of Foreign Tibetan Studies*. Most of these have not been translated into English. Introducing information provided by Chinese publications allows readers in the West to hear from different sources and to come to their own conclusions.
3. English-language publications on all aspects of Tibet studies, ethnic minorities in China, Chinese history and population in China. I searched libraries at Harvard, Brown, UCLA and Duke for relevant books and journal articles when I was a visiting professor at those universities. This book also cites publications by western human-rights organizations such as *Asia Watch*.
4. The questionnaire data obtained from our 1988 household survey and the 2005 temporary migration survey. The official documents and personal-interview information obtained from field research in 1988 and subsequent years, including local government reports, meeting notes, interview records, unpublished reports of other surveys, etc.

My biggest regret is the language barrier. Because I cannot read Tibetan I could not make use of valuable materials in such sources as government documents, tax records, population records, trade records, etc. of the *Kashag* government before the 1950s. These materials would have been very useful in helping us understand Tibet's past and present economic structure. Some members of our team were young Tibetan scholars, but I could not ask them to translate such a huge number of original documents. I hope that, with the help of Tibetan colleagues, some of these materials will be available in the future.

The Structure of the Book

The book consists of 10 chapters.

Chapter 1 is an introduction. This chapter outlines the focus of this study, discusses the major issues in sociological studies pertaining to Tibetan society, introduces the 1988 survey as a major source of our analysis, discusses the theoretical framework of the diffusion-internal colonialism approach and introduces the main data sources for this study.

Chapter 2 defines the geographic scale of "Tibet," discusses the population of Tibetans in China and their distribution patterns, and analyzes the changes in Tibetan population in the past five decades based on the census data.

Because the Han population in Tibet has been a very sensitive issue and there is so much in print about Han in-migrant flows, Chapter 3 focuses on the Han population in the Tibet Autonomous Region and other Tibetan areas of China. It begins with a historical review and ends with a description of the situation today.

Chapter 4 analyzes the changes in fertility, mortality, migration and urbanization in the TAR based on the census data and official statistical records. These four are the principal fields in demographic studies. A structural comparison between the Tibetan and the Han populations is also presented.

The focus of Chapter 5 is migration. There is a review of international and cross-provincial migration, albeit brief owing to the paucity of documentation. Based on the data collected in our 1988 survey, the major part of this chapter discusses several key issues in migration studies, such as the origin-destination comparison, reasons for migration, occupational changes before and after migration, information channels and a comparison between natives and migrants. Periods of travel are also discussed to examine people's geographic mobility. From the analysis that emerges, a general pattern of migration in the TAR becomes clear.

Chapter 6 discusses the economic patterns in Tibet before and after the 1959 land reform. The statistical data on production, finance, transportation and consumption are used to identify the basic characteristics of Tibet's economy. The theoretical framework of core-periphery relations in the diffusion-internal colonialism framework in western literature is referred to in the analysis.

After a brief discussion of the basic characteristics of urbanization in Tibet, Chapter 7 compares the rural-urban differentials in income, consumption and housing in the TAR in more detail, based on our 1988 survey data.

Chapter 8 focuses on marriage patterns and spouse selection in Tibet. Combining information from previous research literature, the statistical data, and the information from our 1988 survey, this chapter discusses several important issues in marriage studies: marriage types, polyandry, decision-making in spousal selection, geographic distance between spouses before marriage, Han-Tibetan intermarriage and divorce.

Chapter 9 begins with a historical look at traditional education in Tibetan monasteries, discusses the development of modern school education and considers several issues such as bilingual teaching and school segregation in Tibet.

The focus of the final chapter is the residential patterns in Lhasa. Chapter 10 reviews the conditions for daily communication among Lhasa residents, discusses the differences between the native Tibetan neighborhoods in the old urban areas and the unit household areas in the new construction zones, in which these particular migrants make up a majority of the residents. An "index of dissimilarity" is calculated to examine the degree of Han-Tibetan residential segregation in this city and the factors related to this residential pattern.

The book is designed to provide readers with data analysis based on the author's own questionnaire survey and systematical analyses of statistical data. These numbers and percentages might help us to understand the social, economic and demographic situation in Tibet, to learn about Tibet from its past to its present and to obtain a whole picture of Tibet from the macro to the micro-level. It is difficult to evaluate from what people have heard and read the degree to which the information is biased. Tibet has never been heaven or hell. Although some questions remain unanswered we hope that these issues will be addressed in future studies.

Our 1988 survey and relevant research are just the beginning of a series of studies on ethnic relations in contemporary China. Other studies have been carried out in Inner Mongolia, Xinjiang, Qinghai, Gansu and Yunnan. These studies point to many unintended consequences of social policies, some unique to socialist societies and others universal, and also reveal some aspects of society that are difficult to change even with the most enlightened policies. Based on the 1988 survey and study of relevant literature, I published a book in Chinese titled *Population and Society in Tibet* (1996a) that many colleagues encouraged me to translate into English. That book has been widely cited in China as well as in the West. This book is based on the Chinese version, with updated statistics, census data, survey analyses and discussion of writings.

Even today, the 1988 survey has significant meaning in the study of Tibet, not only because it was the first large-scale sociological sampling survey ever undertaken in the TAR. The year, 1988, was also very significant in understanding the dynamics of system reform in China. The reform, which started with decollectivization in rural areas in the early 1980s, which freed farmers and revived rural markets, was followed by rural-urban migration and the appearance of private business in cities and towns. Within several years, the social system had experienced fundamental changes and caused new social problems and conflicts, which were the main reasons for the 1987 Lhasa demonstration and 1989 Beijing student demonstration. Therefore, the information obtained from the 1988 survey provided a record of socioeconomic changes in Tibet for that historical moment and a reference to longitudinal studies of Tibetan society.

I studied sociology at Brown University from 1982 to 1987 and received my doctoral degree under the guidance of Professor Sidney Goldstein, a well-known demographer in the fields of migration and urbanization. The topic of my dissertation was "Migrant and Ethnic Integration in Rural Chifeng, Inner Mongolia Autonomous Region, China." To collect data for the dissertation I conducted a household sampling survey in the summer of 1985, covering 2,100 rural households. I carried out a second household-interview survey in 1987 also in the Chifeng area, but this time interviewed town residents, and covering 1,314 households. The 1988 Tibet survey was my third household questionnaire survey. It was also my most difficult because I could not conduct the rural interviews by myself owing to

language barriers. However, the survey was successfully completed and the results form the core of this book. The 2005 Lhasa temporary migration survey and other research we conducted in the TAR in 2008 after the March 14 Lhasa riots were also very successful. Whatever the limits of the survey conception and data, this book, at the very least, is an attempt to achieve large-scale sampling survey data in Tibet and it is presented in the hope of generating discussion and creating a basis for future studies.

2

The Geographic Distribution and Changes in the Tibetan Population of China

For a long time the size of the Tibetan population has been a mystery because of limited data sources and the unreliability of records. I've tried to put together information gleaned from data on the Tibetan population throughout history published in books and articles at different times. This chapter is a review of the relevant literature, especially literature in Chinese before the 1950s.

Owing to the lack of population records in Tibet, even as late as 1953 and 1964 censuses conducted by the People's Republic of China were derived either from reports by local authorities or indirect surveys. The 1982 census was the first time that the Tibetan population was recorded through a process of direct interviews by census staff. Nevertheless, enumerators asked only half the number of questions that they had asked in other parts of China and about 28,000 people were still counted solely through administrative registration records in 1982. The 1990 and 2000 censuses covered all Tibetan regions. The accuracy of the data from the 1982, 1990 and 2000 censuses is widely accepted around the world as well as by the United Nations. For the first time there is an opportunity to study the population dynamics in Tibet with some degree of confidence. This chapter examines the changes in Tibet's population and the geographic distribution patterns based on analyses of the census data.

The Geographic Distribution of the Tibetan-Inhabited Areas

In order to study the population dynamics of an ethnic group it is necessary first to identify its geographic breadth. Historically, the territory of the Tibetan Kingdom (A.D. 610 to A.D. 846) covered the present-day Tibet Autonomous Region, the western part of Sichuan Province and the southwestern part of Qinghai Province (Huang Fensheng, 1985: 57). These areas gradually developed into the three major parts of China inhabited by ethnic Tibetans: i.e., the Tibet Area (the central provinces

of U and Tsang and Ngari in the present TAR), the *Kham* area (including the two Tibetan autonomous prefectures and Muli Tibetan autonomous county in western Sichuan, Chamdo prefecture in the TAR, and the Dechen Tibetan autonomous prefecture in Yunnan Province) and the *Amdo* area (including the Kanlho Tibetan autonomous prefecture, Tianzhu Tibetan autonomous county in Gansu Province and most parts of Qinghai Province) (Figure 2.1). These three constitute Tibetans' major residential areas today. Each area has its own distinct Tibetan dialect. Their written languages share many similarities but their spoken language is so different that it is difficult for them to understand each other.

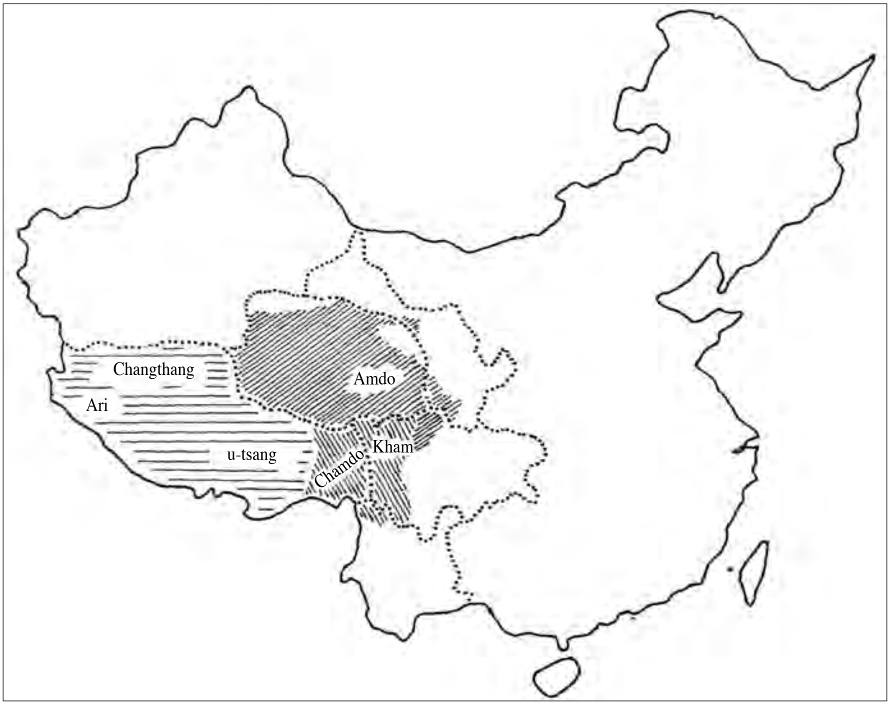


Figure 2.1. Traditional Tibetan-inhabited Areas in China

From the 13th to the early 20th centuries (during the Yuan, Ming and Qing dynasties) the central Chinese government practiced indirect rule over the Tibetan areas. During the Yuan Dynasty (1271–1368) the emperors appointed leaders of the Sakya sect of Tibetan Buddhism as local administrators. During the Ming Dynasty (1368–1644) the emperors appointed prominent local Buddhism monks and certain members of the aristocracy as local leaders. During the Qing Dynasty (1644–1911) the emperors conferred the titles of the Dalai Lama and Panchen Lama (the two leaders of the *Gelugpa* sect of Tibetan Buddhism) and established the local *Kashag* government in 1721. The Emperor Qian Long established resident commissioners

(*Ambans*) and garrisoned a small number of troops in Lhasa as well as in important towns in Tibet. Tibet has always been considered a remote periphery in the far west, and the political, economic and personal interactions between Tibet and central China have been very limited.

During the Qing Dynasty, the *Kham* (the eastern part) and *Amdo* areas (the northeastern part) were ruled directly by the central government under a system of native rule called the *Tusi* system. This system was first established by the Yuan Dynasty in the 13th century in Tibet and minority areas in southwestern China. *Tusi* were selected from local minority tribal leaders who showed their loyalty to the central government. These two areas were under the administration of central government commissioners: the Sichuan Governor based in Chengdu for the *Kham* area and the Xining commissioner based in Qinghai for the *Amdo* area (Huang Fensheng, 1985: 229; Goldstein, 1997: 16). *Tusi* were hereditary and under the direct administration of the regional commissioners. They paid taxes and provided other services to the government. Meanwhile, as the top leaders of the Gelugpa sect of Buddhism, the Dalai and Panchen Lamas had strong religious influences in the *Kham* and *Amdo* areas mainly through local monasteries.

Language-wise, Chamdo residents speak the *Kham* dialect. Chamdo was under the same administrative unit as other *Kham* areas during the Yuan and Ming dynasties (Li Wenguang, et. al, 2000: 48, 63). In 1726 it was officially decided that the administrative boundary between Tibet and Sichuan Province would be the Jinsha River (the upper reaches of the Yangtze River) (Li Wenguang, et. al, 2000: 84). Chamdo had been under the *Kashag* government during the Qing Dynasty. From 1907 to 1909 Zhao Erfeng, the Commissioner of Frontier Affairs of the Qing, launched the "gai-tu-gui-liu" (turn the hereditary Tusi system leaders into assigned officers in local administration) campaign in the Chamdo area with military forces. In 1909 the Qing Court issued an order to put Chamdo (county), Dayak and Markham under the administration of the commissioner. In the following years Zhao Erfeng controlled the Chamdo area (Li Wenguang, et. al, 2000: 118–120). After the 1911 revolution, Chamdo became the battleground between the Tibetan army and the army of the new Republic of China. The *Kashag* government controlled Chamdo from 1918 to 1950 (Li Wenguang, et. al, 2000: 135–156; Goldstein, 1989: map 6).

Before we discuss the Tibetan population and the Tibet Area, two points need to be clarified. First, "Tibetans" as an ethnic group and "Tibet" as a geographic concept do not coincide. Throughout Chinese history "Tibet" has usually referred mainly to central Tibet, including U, Tsang plus Ngari and Chamdo — the geographic areas managed administratively by the Tibetan *Kashag* Government and from which they collected taxes. When "Tibet" is used in China today it refers to the TAR, which has a similar geographic coverage as in the Qing Dynasty. However, when Tibetans in exile talk about "Tibet," they refer to all three areas, including *Kham* and *Amdo*.[1] In this study, discussions about the Tibetan population refer to ethnic Tibetans living

in all three areas (TIR). In other parts of this study, when referring to population figures, there will be careful clarification of geographic coverage, which will be either "Tibetan population in the TAR" or "Tibetan population in the TIR."

In the early 1950s the Chinese government started a nationwide campaign focused on the "recognition" of ethnic minorities. Scholars were sent to visit all areas and carried out research to identify ethnic minority nationalities. With such an official status, these groups could establish their autonomous areas and send representatives to congress at all levels. Among more than 400 groups that applied for this status besides Han group, only 55 (including Tibetans) were admitted.[2] All citizens in China were then registered according to their official ethnic status, which they kept. This registration status became the basis on which the populations of all ethnic groups were calculated and policies toward minority groups implemented.

Secondly, in Tibet, as in many autonomous areas, there are residents from different ethnic groups. Statistics from the censuses show that Tibetans are highly concentrated in their traditional areas. About 99.8 percent of Tibetans in China live in the TAR, Sichuan, Qinghai, Gansu and Yunnan (Table 2.1). In 2000 Tibetans lived in the 31 provinces, municipalities and autonomous regions of China, ranging from 450 in Hainan province to 2.43 million in the TAR. In comparison, the percentage of Tibetans who lived in Qinghai and Gansu increased while the percentage of those in the TAR, Sichuan and Yunnan decreased during the past several decades.

It is clear that in 1953 the Tibetan population in the other 24 provinces and autonomous regions in China was very small (under 1,000). It increased in the following years, especially from 1982 to 2000. The Tibetan population more than tripled in these provinces from 1982 to 1990, and increased more than 4.5 times from 1990 to 2000. The growth of the Tibetan population in these provinces owes much to migration. Tibetans practiced various trades, made handicrafts and engaged in other productive activities across provincial borders, as well as participating in educational and cultural exchanges in other areas. The largest Tibetan population (7,020 people) in these provinces lived in Guangdong, the province "one step ahead" in system reform compared with other areas.

There is also a large Tibetan population in neighboring countries (India, Nepal, Bhutan, Sikkim and the Kashmir region), numbering about one million by some estimates (Kolb, 1971: 365–366). When the Dalai Lama fled to India in 1959, his followers also left for India, Nepal and Sikkim. By one account they numbered about 60,000 (Richardson, 1962: 214); others have estimated from 50,000 to 55,000 (Grunfeld, 1987: 187) and 80,000 (Goldstein, 1989: 825), and 91,000 (Zhang Tianlu, 1989: 10). Accounting for a natural increase in the past five decades, the total number of Tibetans in exile in India and Nepal is 100,000 to 125,000, with several thousand others who migrated to Europe, Canada and the United States.

The Dalai Lama claimed in 1962 that the total Tibetan population was around seven to eight million (Dalai Lama, 1962: 200). The over-estimation probably

Table 2.1. The Geographic Distribution of Ethnic Tibetans in China

Province*	Num.	%	Province*	Num.	Province*	Num.	Province*	Num.	Province*	Num.
Tibetan population in 1953 census										
Province*	Num.	%	Province*	Num.	Province*	Num.	Province*	Num.	Province*	Num.
Tibet	1000000	36.3	Inner Mongolia	377	Guizhou	16	Hebei	6	Rehe	1
Chambo	273969	10.0	Beijing	334	Heilongjiang	10	Hunan	5	Guangxi	0
Xikang	478779	17.4	Shaanxi	57	Anhui	9	Shandong	4	Ningxia	0
Sichuan	234090	8.5	Xinjiang	37	Guangdong	9	Hubei	3		
Qinghai	493639	17.9	Jiangxi	30	Jiangsu	9	Fujian	3	Above 24	981
Gansu	204730	7.4	Zhejiang	28	Liaoning	8	Jilin	3		
Yunnan	66983	2.4	Shanxi	24	Shanghai	6	Henan	2		
Total	2753081	100.0								
Tibetan population in 1964 census										
TAR	1208663	48.3	Shaanxi	2420	Shanghai	69	Heilongjiang	28	Jiangxi	6
Sichuan	606652	24.2	Xinjiang	958	Hebei	65	Anhui	23	Fujian	4
Qinghai	422664	16.9	Beijing	808	Shanxi	60	Jiangsu	23	Others	3454
Gansu	192494	7.7	Inner Mongolia	459	Liaoning	45	Zhejiang	22		
Yunnan	65258	2.6	Henan	152	Hunan	45	Ningxia	15		
Above 5	2495731	99.6	Guangdong	83	Hubei	36	Guangxi	14	Above 24	8897
Total	2504628	100.0	Guizhou	76	Shandong	29	Jilin	8		
Tibetan population in 1982 census										
TAR	1786544	45.9	Xinjiang	1967	Shandong	173	Hubei	83	Zhejiang	35
Sichuan	921984	24.0	Shaanxi	1120	Guangxi	149	Jiangsu	82	Tianjin	30
Qinghai	753987	19.6	Beijing	820	Hebei	127	Shanxi	75	Jilin	18
Gansu	304573	7.9	Henan	521	Anhuei	105	Liaoning	67		
Yunnan	95925	2.5	Inner Mongolia	504	Shanghai	104	Heilongjiang	55	Above 24	6896
Above 5	3862923	99.7	Guangdong	388	Hunan	95	Ningxia	47		
Total	3874035	100.0	Gueizhou	205	Fujian	87	Jiangxi	39		
Tibetan population in 1990 census										
TAR	2096346	45.6	Xinjiang	2235	Jiangsu	866	Hunan	552	Ningxia	198
Sichuan	1087510	23.7	Henan	1606	Inner Mongolia	807	Tianjin	505	Heilongjiang	186
Qinghai	911860	19.9	Beijing	1329	Hubei	760	Shanxi	474	Jilin	143
Gansu	366718	8.0	Shaanxi	1319	Gueizhou	677	Jiangxi	397	Hainan	101
Yunnan	111414	2.4	Guangdong	1307	Shanghai	637	Zhejiang	393		
Above 5	4573848	99.6	Hebei	995	Liaoning	625	Fujian	282	Above 25	18095
Total	4593330	100.0	Shandong	932	Anhuei	558	Guangxi	211		
Tibetan population in 2000 census										
TAR	2427168	44.8	Guangdong	7020	Shandong	2733	Guizhou	1787	Fujian	1290
Sichuan	1269120	23.4	Xinjiang	6153	Jiangsu	2659	Heilongjiang	1655	Tianjin	1271
Qinghai	1086592	20.1	Henan	3953	Chongqing	2292	Jiangxi	1649	Zhejiang	1084
Gansu	443228	8.2	Hebei	3096	Anhui	2263	Hubei	1648	Ningxia	506
Yunnan	128432	2.4	Shaanxi	3048	Guangxi	2194	Shanghai	1642	Hainan	450
Above 5	5334540	98.9	Hunan	2930	Inner Mongolia	2062	Jilin	1615		
Total	5416021	100.0	Beijing	2920	Liaoning	2017	Shanxi	1544	Above 26	81481

* Including provinces and autonomous regions.

Sources: Census Division of State Statistical Bureau, 1986a: 183–185; 1986b: 284–290.
Almanac of China's Population (1985), p. 620.
Population Census Office of SBC, 1993a: 302.
PCOSC, 2002a: 20.

included all ethnic Tibetans in South Asian countries.[3] Even *Asia Watch,* which strongly supports the Tibetans in exile, stated in its *Report of Human Rights in Tibet* (1988) that "it is the position of Tibetans in exile and of many sympathetic non-Tibetans, that there are presently 7.5 million Chinese on the Tibetan Plateau as opposed to six million Tibetans. The former figure is at best difficult to substantiate, while the latter one must be rejected . . . [the six million figure] has actually become more symbolic than literal, as if Tibet's population had remained unchanged for at least 20 years (*Asia Watch*, 1988a: 41–42)." In fact, the Tibetan population in China in 2000 should have been no more than 5.42 million.

Since the 1950s, apart from the TAR, 10 Tibetan autonomous prefectures, two Tibetan autonomous counties and one Tibetan autonomous *xiang* have been established in four provinces (Figure 2.2). One observation is noteworthy: there were 430,000 Han, 220,000 Hui, Mongolian, Qiang, Yi and other ethnic groups in all these areas in 1953 (Ma and Pan, 1988a: 24). According to the 1953 census, there was a total of 2,753,000 Tibetans in China. Therefore, in 1953 non-Tibetans consisted of 19.1 percent of the total population in Tibetan autonomous areas.

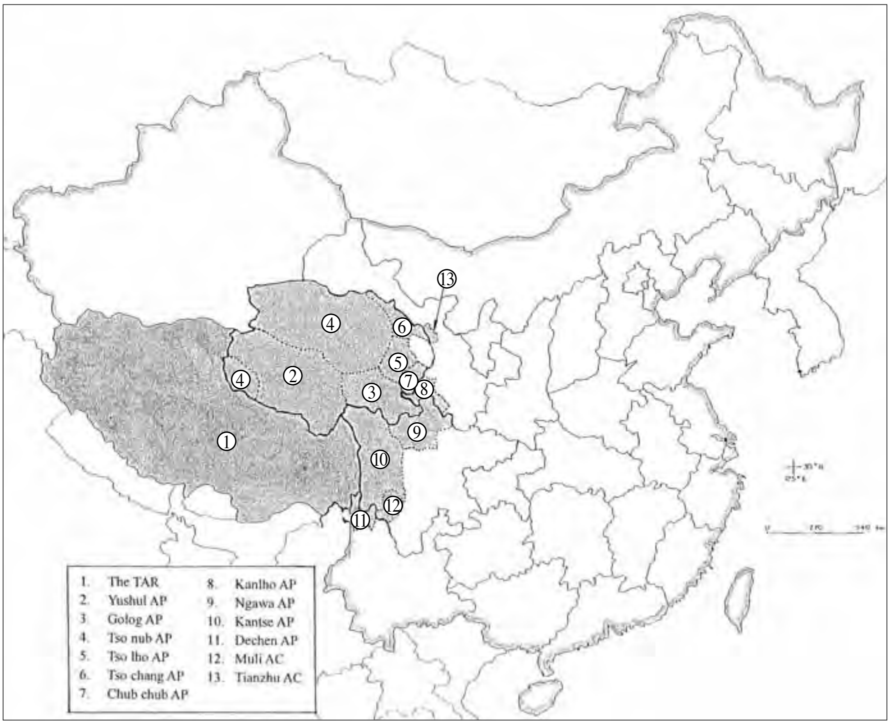


Figure 2.2. Tibetan Autonomous Areas in China

Table 2.2. The Date of the Establishment of the Tibetan Autonomous Areas and Their Population Structure in the 1953 Census

Areas	Date of establishment	Total Population	Tibetan population	% of Tibetans	Han population	% of Han
TAR	Sept. 1965	1,273,969	1,273,969	100.0	0*	0.0
Golog Auto-Prefecture	Janu. 1954	100,343	100,102	99.8	240	0.2
Yushul Auto-Prefecture	Dec. 1951	126,383	125,309	99.2	1,015	0.8
Chub chub Auto-Prefecture	Dec. 1953	69,086	61,398	88.9	3,258	4.7
Tso nub Mongol-Tibetan-Kazak A-P	Janu. 1954	20,585	7,999	38.9	2,718	13.2
Tso lho Auto-Prefecture	Dec. 1953	115,721	79,438	68.6	29,175	25.2
Tso chang Auto-Prefecture	Dec. 1953	73,023	24,028	32.9	25,896	35.3
Kanlho Auto-Prefecture	Oct. 1953	300,494	158,487	52.7	117,200	39.0
Kantse Auto-Prefecture	Nov. 1950	503,892	420,314	83.4	76,070	15.1
Ngawa Tibetan-Qiang Auto-Prefecture	Janu.1953	392,707	230,500	58.7	118,821	30.3
Dechen Auto-Prefecture	Sept. 1957	158,683	64,611	40.7	27,878	17.6
Tianzhu Auto-County	May 1950	58,731	19,972	34.0	38,096	64.9
Muli Auto-County	Feb. 1953	45,472	24,393	53.6	7,667	16.9
Total 13 Tibetan autonomous areas	1950-1965	3,239,089	2,590,520	80.0	448,033	13.8

* Kashag government reported no Han residents in its area.
Source: Census Division of State Statistical Bureau, 1986a.

Table 2.2 shows that among the 13 Tibetan autonomous areas (region, prefecture and county) in 1953, the Tibetan population made up less than 50 percent of the total population in three prefectures and one county. The Han population exceeded 25 percent in five areas, even reaching 64.9 percent in Tianzhu Tibetan Autonomous County. Therefore, in the 13 areas established for Tibetans, in 1953, out of a total population of 3,239,089 there were 448,033 Han residents (13.8 percent) and 200,536 residents who belonged to other ethnic groups (6.2 percent).

For the purposes of this study all Tibetan autonomous areas together constitute the traditional Tibetan-inhabited areas (TIA). In this chapter, the population analysis of the Tibetan population will cover all the Tibetan-inhabited regions.

In 2000 there were 404,588 Tibetans living outside the Tibetan autonomous areas, which is 7.4 percent of the total Tibetan population. In 1990 the number of Tibetans living outside their autonomous areas was 299,928. That means a growth of 35 percent in this 10-year period. The rapid growth marked a significant trend, namely that the Tibetan population was spreading outside traditional places of habitation into other areas during a time of political reform and economic development throughout China.

The Tibetan Population in History

Historical demographic data for the Tibetan population is limited and they are estimates without reliable sources. Among the relevant literature, *Population of China: Tibet Volume* gives the most systematic and detailed historical data about the Tibetan population (Liu Rui, 1988). According to this book, during the Mongolian Yuan Dynasty, Emperor Kubilai Khan sent his officials to Tibet three times to check the household registration records. Based on the results of these surveys, he established 13 *wanhu* (a Mongolian administrative and military unit with about 10,000 soldiers and their households) in central Tibet as the local administrative units. These surveys registered a population of 38,963 households and 234,000 individuals. Because these surveys did not include the Ngari Region, Sakya area (under the direct management of Sakya Buddhist sect) or households subordinated to aristocratic families, they were not complete censuses. If the populations in other Tibetan-inhabited areas were included, the total Tibetan population in the 13th century might have been around 560,000 (Liu Rui, 1988: 50–54).[4]

From 1734 to 1736, the Qing Dynasty carried out the first population census in Tibet. According to the *Tibet Chronicles*, which referred to this census, "there was a total population of 941,151 in the Tibet region including 316,231 monks who comprised 33.6 percent of the total (Liu Rui, 1988: 55)." In 1737 the administrative records of the Qing Dynasty show there were 957,150 Tibetans under the Dalai and Panchen lamas' administration (Huang Fensheng, 1985: 264). Another study indicates that this number excludes the residents outside the monasteries' control and the real population was closer to 1,340,000 at that time (Wang Ke and Wu Yiping, 1982: 60). A recent study reveals that, "according to a report in *Tibet Chronicles* in 1737, there were about 1,300,000 Tibetans (Dorji Tseden and Gyaltsen Norbu, 1995: 24)."

The Republic of China's (ROC) Ministry of the Interior estimated a Tibetan population of 3,722,011 in 1928, then 5,234,359 in 1929 (Hong Dicheng, 1936: 41). Obviously, these numbers were rough estimates and might have referred to different geographic areas. The 1928 data referred to only the Tibet area, and the 1929 data might have referred to total areas inhabited by Tibetans. A book published in 1937 (*Tibet Issue*) reported that the Tibetan population was 3,723,000 (Chen Jianfu, 1937: 4), but no sources were cited. The *Shenbao Yearbook* (1934) reported that the Tibetan population was only 1,050,000.

From 1909 to 1911 the Qing court organized a national census, the data from which became available after the 1911 revolution. Wang Shida and Chen Changheng analyzed that set of data in the 1930s, reporting 1,357,722 Tibetans for all Tibetan areas and 1,160,758 Tibetans for the Tibet Area (excluded those living in Sichuan, Qinghai and other provinces) (Hou Yangfang, 2001: 239, 245).

In the late 1930s Lin Donghai (who was a member of the 1934 central government delegation to Lhasa headed by Huang Musong) reported that the Tibetan population in 1939 was only between 700,000 and 800,000 (Hong Dichen, 1936: 42; Ma Hetian, 1947c: 586), probably referring only to the Tibet Area. During the late Qing Dynasty and the Republic period, some officers and scholars traveled to Tibetan areas and provided brief estimates of the Tibetan population. Those numbers, for which no sources were cited and that contradicted others, reflect the weak administration at that time and dearth of local statistics.

Some estimates of the Tibetan population are listed in Table 2.3 as a reference. The large differences between these numbers reflect the different perceptions of the geographic area that encompasses "Tibet" as well as a lack of population statistics for any of the Tibetan areas. Although these estimates are quite different from each other they seem all to agree that during the Qing Dynasty (1644–1911) the Tibetan population declined (Grunfeld, 1987: 218). Commissioner Zhang Yintang (an *Amban* in Lhasa in the 1910s) believed that the "Tibetan population decreased by about 800,000 during 1736–1900 (Hong Dichen, 1936: 218)." The conclusion by Ya Hangzhang was that the "Tibetan population diminished by about 8 million or 80 percent during a 1,000 year period from the Tang Dynasty to the Qing Dynasty. The population figures reported by the Tibetan government in 1951 after the peaceful liberation were about 1.2 million, a decrease of another 800,000, a 40 percent reduction in this 200-year period from the Emperor Yong Zheng to 1951 (Xu Ming, 1989: 279)."

The reasons for the decline might include: (a) climate and topography that could not support a large population; (b) the practice of polyandry, which reduced the numbers of families and children; (c) widespread venereal disease, and (d) a large, mostly celibate clergy (Grunfeld, 1987: 218). Before the 1950s monks comprised about one-third of the total Tibetan population, and women became the major labor force. Under the serf system, a large number of the people (about 60 percent, cf. Grunfeld, 1987: 13) were serfs with no freedom and with a heavy labor burden. These factors also had a negative impact on fertility and population growth.

Because of the lack of any comprehensive census system in Tibet throughout the centuries, no systematic population numbers are available. Estimates of the Tibetan population throughout history vary widely and the different geographic definitions of Tibet have made these estimates even more complicated.

Table 2.3. Estimates of Tibetan Population (in millions)

Resource	Date	Tibetan population
Bureau of Minority Affairs, Qing Dynasty	1737	0.96
W. W. Rockhill	1895	3.0
Sarat Chandra Das	1905	2.5–3.0
Encyclopedia Britannica	1910	3.0
Ministry of the Interior, KMT	1928	3.7
Pedro Carrasco	1928	3.9
Ministry of the Interior, KMT	1929	5.2
David MacDonald	1929	3.9
Lin Donghai	1934	0.7–0.8
Charles Bell	1936	3.0–4.0
Office of Strategic Services (USA)	1944	4.0
Ministry of Interior, KMT	1947	2.8
A. J. Hopkinson	1950	3.0
Heinrich Harrer	1959	4.0
Hugh Richardson	1962	3.0
Rolf Alfred Stein	1962	3.5–4.0
The 14th Dalai Lama	1962	7.0–8.0
Michel Peissel	1972	7.0
The 14th Dalai Lama	1987	6.0

Source: cf. A. Tom Grunfeld, 1987: 219.

Changes in the Tibetan Population since the 1950s

In 1951 all areas where ethnic Tibetans inhabited were under the control of the central government of China. To examine the changes in Tibet's population since 1951, its status in the early 1950s needs to be discussed.

Citing numbers from the *History of Tibetans* (Huang Fensheng, 1985), the Tibetan population and its geographic distribution in the early 1950s is shown in Table 2.4. The numbers provided in this study are very close to the results of the first census. During the first census (1953), the Tibetan population in the Tibet Area was reported by the *Kashag* government under the leadership of the Dalai Lama and the population for the Chamdo Region was reported by the Chamdo administrators. The Tibetan population in other areas was calculated in detail, county by county. Generally speaking, the actual number of Tibetans in the early 1950s should be close to the results of the first census (2,753,081). In these Tibetan-inhabited areas (totaling 2.2 million square kilometers), about one million square kilometers were covered by the census registration and the results showed that the covered area was where about 54 percent of the total Tibetan population lived.

Table 2.4. The Tibetan Population in the Early 1950s (in 10,000)

Area	The early 1950s*	First census (1953)
Tibet Area	127.5	100.0
Chamdo Region		27.4
Xikang Province	60.0	49.9
Qinghai Province	42.5	47.4
Gansu Province	14.5	20.5
Sichuan Province	33.1	23.4
Yunnan Province		6.7
Total	277.6	275.3

* Source: Huang Fensheng, 1985: 384.

The land reform program was carried out in the Tibet Area after 1959. Since then, health care and hygiene have improved throughout the Tibet Area. Before then, serfdom, poor living conditions and inadequate health care facilities resulted in low fertility and high mortality rates. The situation improved after 1959, but it would have been impossible for the Tibetan population to increase from 1.27 million (as the *Kashag* government reported in 1953) to the seven or eight million in 1962 (Table 2.2). The Statistical Bureau of the TAR (SBT) recorded 1.3 million in 1962 (Sun Zerong and Wang Daben, 1985: 546).

The second national census was held in 1964 in China. The results estimated the total Tibetan population at about 2,501,174, a decline of 251,907 from the 1953 census. The population of the TAR (including the Chamdo Region) was estimated at 1,208,163, a decrease of about 65,837 during the same 11-year period. The remaining 186,070 were from other autonomous areas in the four provinces of Qinghai, Gansu, Sichuan and Yunnan.

The reasons for the declines have never been explored and seldom do experts discuss the changes. In my opinion they can be attributed to three factors: (a) The Tibetan population might have been affected by the nationwide population decline caused by serious famine in China in the early 1960s. There was a major famine in many areas partly because of natural disasters and partly due to policy adjustment, especially the commune system (Ashton, et al. 1992: 235–236). During attempts at establishing a commune system, the population of China as a whole experienced a decrease of 13.48 million from 1959 to 1961 (*Almanac of China's Population (1985)*, p.807). Because the commune system was gradually established in the TAR from 1965 to 1975, the impact of the commune on mortality might have affected other Tibetan areas outside the TAR; (b) the data of both these censuses for the TAR were from estimates based on registration records. It was easy to make accounting mistakes because in 1953 there was no formal residential registration system in those areas and the registration system was incomplete in 1964; (c) a number of

Tibetans fled to India and other south Asian countries following the 1959 rebellion, and the Tibetan population in China decreased as a result. Apart from errors in estimates, an American demographer suggests three similar reasons for the decline of the Tibetan population in the 1950s: high mortality, low fertility and a portion of the population in exile (Banister, 1987: 306–307).

After looking at the census data, let us turn to the records for the local residential registration. The Regional Registration Bureau reported only 1.15 million for the Tibet Area and the Chamdo Region together in 1952 (Tibet 0.88 million, Chamdo 0.27 million). The Tibetan *Kashag* government reported that there was a population of one million Tibetans in the Tibetan Area they controlled, and this number was recognized by the central government in the 1953 census. The result of the first census reported 1.27 million for the Tibet Area and Chamdo Region together. For the 1964 census the reports indicated a population of 1.25 million in the TAR (Tibet Area and Chamdo Region together) while the regional registration records showed a population of 1.35 million for the same geographic areas. Therefore, when we look at data from the 1953 and 1964 censuses, the Tibetan population in TAR decreased by about 65,837 during this period, and when we look at registration records we find population growth of 0.2 million.

Determining which of these sources is more reliable will require careful examination. But at least three points support the numbers provided by local residential registration, making their numbers more convincing:

1. The exact one million population in Tibet (excluding Chamdo Region) reported by the *Kashag* government might have been overestimated. At that time the relationship between the *Kashag* and the central government was very uneasy. It might have made sense for the *Kashag* government deliberately to overestimate the population under its control. On the other hand, the early 1950s data of the population in the Tibet Area (0.88 million) released by the Statistical Bureau of the TAR were also "estimates based on some materials and data (Liu Rui, 1988: 61)." The accurate size of the Tibet Area population in the 1950s needs further study.
2. The residential registration system was established in northern pastoral areas in Tibet in 1964, and some herdsmen in those remote and low-density areas might have been covered by local registration but not by census teams.
3. From the annual records of the TAR residential registration released by the statistical bureaus (Table 2.5), we can track the continual population increase year by year. These data were collected and checked carefully by local public security systems through the registration of births, deaths and migration, then reported to government statistical bureaus. The censuses were organized by the statistical bureaus in cooperation with the local public security system. Because the census registration was carried out only once (July or November of the census year), it was quite possible some residents were not covered.

There was no census registration in the Tibet Area in 1953, so it follows that the number was not correct.

Table 2.5. The Total Population and Tibetan Population in the TAR (in 10,000)

Year	Total Population	Tibetan	Tibetan %	Year	Total Population	Tibetan	Tibetan %
1951	114.09			1982*	(186.36)	(176.46)	(94.7)
1952	115.00			1933	193.14	183.70	95.1
1953*	(127.00)	(127.00)	(100.0)	1984	196.68	187.64	95.4
1959	122.80			1985	199.48	190.97	95.7
1960	126.98			1986	202.49	193.74	95.7
1961	129.87			1987	207.95	198.38	95.4
1962	130.17			1988	212.31	202.67	95.5
1963	132.38			1989	215.91	206.76	95.8
1964	134.67			1990	218.05	209.56	96.1
1964*	(125.12)	(120.87)	(96.6)	1990*	(219.60)	(209.67)	(95.5)
1965	137.12			1991	221.78	213.45	96.2
1966	139.67			1992	225.27	216.80	96.2
1967	142.41			1993	228.88	220.62	96.4
1968	145.16			1994	231.98	223.59	96.4
1969	148.05			1995	235.55	226.87	96.3
1970	151.20			1996	239.30	230.52	96.3
1971	155.38			1997	242.74	233.98	96.4
1972	159.28			1998	245.39	236.13	96.2
1973	162.92			1999	247.72	238.80	96.4
1974	166.12			2000	251.23	242.19	96.4
1975	169.11			2000*	(261.63)	(242.72)	(92.8)
1976	172.40			2001	253.70	244.10	96.2
1977	175.62			2002	255.44	244.92	95.9
1978	178.82	162.29	90.8	2003	259.21	246.47	95.1
1979	182.69			2004	263.44	252.07	95.7
1980	185.28	171.82	92.7	2005	267.55	254.93	95.3
1981	185.96	174.72	94.0	2006	268.58	–	–
1982	189.25	178.65	94.4	2007	273.59	260.28	95.1
				2008	279.23	264.50	94.7

The numbers in this table were the population of the TAR by the end of each year, released by SBT.

* The census result is usually less than the number of the end of the respective year since the census interviews were carried out in July in 1964, 1982, and 1990.

Sources: SBT, 1989: 140; 1993: 67–68; 1995: 39; 1999: 35; 2000: 33; 2007: 29–33, 2009: 33.

The third census (1982) covered the TAR and reported that the total Tibetan population in China had reached 3,847,875. The Tibetan population in the TAR had increased from 1,208,700 to 1,764,600 from 1964 to 1982 (the average annual growth rate was 2.12 percent).[5] The average annual growth rate for the total Tibetan population in China was 2.42 percent, which suggests that the Tibetans in regions outside the TAR had a higher population growth. These regions had higher per capita incomes, better transportation systems and the local economy, education and health-care facilities developed more rapidly, which in turn reduced mortality rates. In general, 1964 to 1982 was a period of growth for the Tibetan population in China, and its average annual growth rate (2.422 percent) was higher than that for the total population of China (2.095 percent) during the same period (Table 2.6).

Table 2.6. The Sizes and Growth Rates of the Total Tibetan Population in China and the Total Population in China (including Tibetans) by Census

Date of census	Tibetan population	Total population in China
1953	2,753,081	577,856,141
1964	2,501,174	691,220,104
1982	3,847,875	1,003,913,927
1990	4,593,072	1,130,510,638
2000	5,416,021	1,242,612,226
Period	**Average annual growth rate of Tibetan population (%)**	**Average annual growth rate of total population in China (%)**
1953-1964	–0.869	1.642
1964-1982	2.422	2.095
1982-1990	2.238	1.496
1990-2000	1.662	0.950
(1953-2000)	1.450	1.642

Source: Economic and Development Dept., State Ethnic Affairs Commission and Dept. of Integrated Statistics, State Statistical Bureau, PRC, eds. 2007, p. 488.

From Table 2.5 we can see that the 1982 census data in the TAR were still lower than registration records of population (28,900 fewer). This discrepancy was partly due to the timing (the registration record was by then determined at the end of year and the census data by July; people usually visit relatives during summer and could not be covered by census), and partly due to the fact that some herdsmen in pastoral areas were covered by the registration in winter but not by the census in summer.

Throughout the 1980s the central government increased investment throughout the TAR, and the local statistical systems were more complete. The fourth census

(1990) was carried out by direct registration in all areas of the TAR for the first time in history. This improved coverage, accuracy and reliability. Its results were very similar to the registration records, especially for the Tibetan population. The census data were a little higher because they covered some temporary migrants who were not included in the registration system.

The fourth census reported 4.59 million Tibetans in China and an annual growth rate of 2.24 percent from 1982 to 1990. In comparison, the national annual growth rate for China as a whole had declined to 1.50 percent during the same period primarily because of a birth-control campaign. The average annual growth rate of the Tibetan population in the TAR was 2.18 percent, a little lower than the national growth level for all Tibetans. The difference reflects that health care services, social welfare and the local economy in the Tibetan areas outside the TAR developed faster than they did in the TAR because of their geographic location close to Han regions and better infrastructure for transportation and communication.

The fifth census, which was held in November 2000, produced results much higher than registration data because the number of temporary migrants had increased significantly. The annual growth rate of the Tibetan population in China was 1.66 percent from 1990 to 2000, higher than the national rate of 0.95 percent, which declined yet further.

The third, fourth and fifth censuses provide population data for about 147 counties in Tibetan-inhabited areas, so we can examine the changes in population density and geographic distribution of the Tibetan population.

From Figure 2.3, it is clear that in 1990 most counties had a population density of fewer than 50 persons per square kilometer except for Lhasa City and Lintan County in Gansu Province. About 23 counties (16 percent of the total) had a density of less than 1 person per square kilometer. The population density in the TAR was 1.6 persons per square kilometer in 1982, 1.8 in 1990 and 2.1 in 2000. In comparison, the average population density in China was 105 in 1982, 118 in 1990 and 133 in 2000. Therefore the Tibetan-inhabited areas still had the lowest population density areas throughout the country.

Because 72 counties in the TAR were not covered by the 1953 census, we cannot compare the changes in the size and geographic distribution of the Tibetan population for the period 1953 to 1990 for all 147 counties. Therefore, we will concentrate on 75 counties in the TIA other than the TAR to study the changes in the Tibetan population. These areas comprised about half the counties of autonomous areas for Tibetans, consisting of 46 percent of the total Tibetan population. These counties are situated between the TAR and Han regions and have been the key areas for Han-Tibetan communication, trade and migration. Therefore, the discussion of demographic changes in these areas, especially on migration, is quite significant.

The changes in the Tibetan population by county from 1964 to 1990 are shown in Table 2.7. Because there were some changes in the administrative boundary

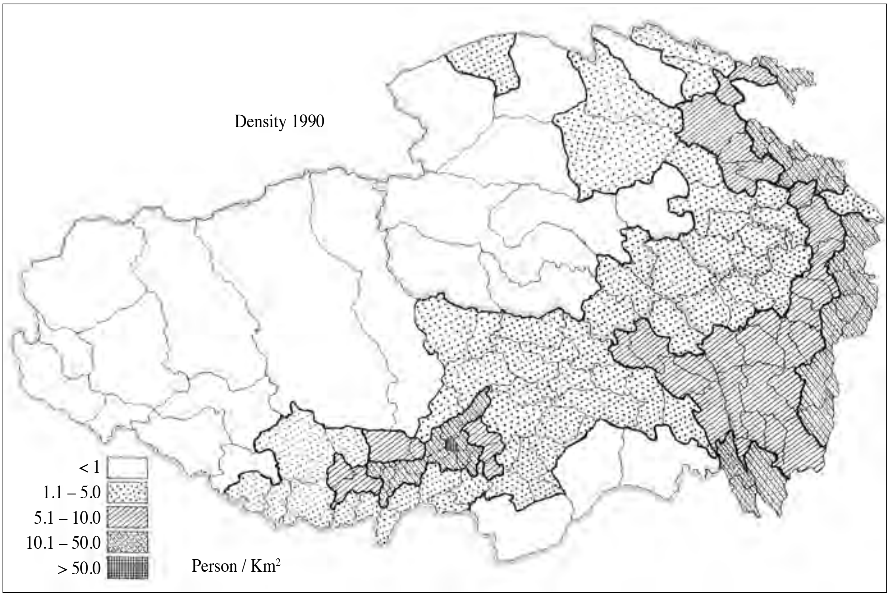


Figure 2.3. Population Density in Tibetan-inhabited Areas in 1990

during the period, it is difficult to adjust population data for each small unit. There were no data for Golog area. One new county (Seda) in Sichuan, and one new county (Diebu) in Gansu appeared in the 1964 census. Delingha as a county-level unit first appeared in the 1990 census. Nima County in Nahchu and Gonghe County in Kanlho appeared only in the 2000 census. The establishment of new counties split from previous counties resulted in territory and population decreases in previous counties. The boundary changes between counties were complicated and it is very difficult to adjust the population records according to new territory. Therefore, we can only roughly compare the data for those counties with the same names between 1964 and 2000.

The Tibetan population continually increased in most areas, but their percentages in total population varied by region. The fastest population growth period of Tibetans in these four provinces took place from 1964 to 1982. Tibetans doubled their population in 11 of 70 counties. From 1990 to 2000 only Batang County experienced a decline in the Tibetan population. The number of Tibetans in this county decreased from 44,190 in 1990 to 41,802 in 2000 while that for Han fell from 2,345 to 1,952 during this period. The adjustment of territory might be an explanation.

Table 2.7. Changes in the Tibetan Population in Qinghai, Gansu, Sichuan, and Yunnan Provinces by County from 1964 to 2000

Change in Tibetan population	**1964–1982**		**1982–1990**		**1990–2000**	
	# of counties	%	# of counties	%	# of counties	%
Decreased	0	0.0	0	0.0	1	1.4
Increased 1–1.5 times	20	28.6	66	93.0	65	90.3
Increased 1.5–2 times	39	55.7	4	5.6	4	5.6
Increased 2–3 times	9	12.8	0	0.0	2	2.8
Increased over 3 times	2	2.9	1	1.4	0	0.0
Total	70	100.0	71	100.0	72	100.0

Sources: census data by county in provincial census reports.

From 1982 to1990 the percentage of Tibetans in total decreased in 15 counties among the total 72 counties in the TAR. Except for six counties, the percentage of Tibetans in total decreased in the other 57 counties from 1990 to 2000. But in 35 counties the percentage of Tibetans fell less than 1 percent only. The decline reflects the fact that more Han people (mostly temporary migrants) had moved into the TAR. Because the percentage of Tibetans in total continually increased in counties in four other provinces, it seems that the main destination of Han workers and businessmen was not the other Tibetan areas but the TAR, where construction projects and tourism developed fast.

From 1990 to 2000, the Tibetan population continually increased. In this 10-year period, numbers of Tibetans in two counties (Maoxian and Luding in Sichuan Province) more than doubled, the explanation for which could be in-migration or border adjustment. During the 10 years, Tibetans in most counties in the TAR and other Tibetan autonomous areas increased 1 to 1.5 times. Among a total 75 counties in the TAR, only two counties experienced a decline in their Tibetan populations while numbers of Tibetans increased in all other counties. This is clear from Table 2.4. It is safe to say that the Tibetan population in general has experienced significant growth in the past four decades. Since 1951, except for a number of Tibetans who followed the Dalai Lama to India, there has been no sign of any unusual rapid population decline.

Generally, any unusual population decline can be traced to age structure, and a population pyramid will show some shortened concaves in respective age-cohorts or gender. For example, the Chinese population pyramid showed a large concave for the male middle age-cohort during the war following the Japanese invasion, as well as concaves due to the famine for both gender cohorts born in the early 1960s. Figure 2.4 shows the age structures of Tibetans and Han in the TAR in 1990. This is a good comparison of the Han and Tibetan populations in age distribution. It

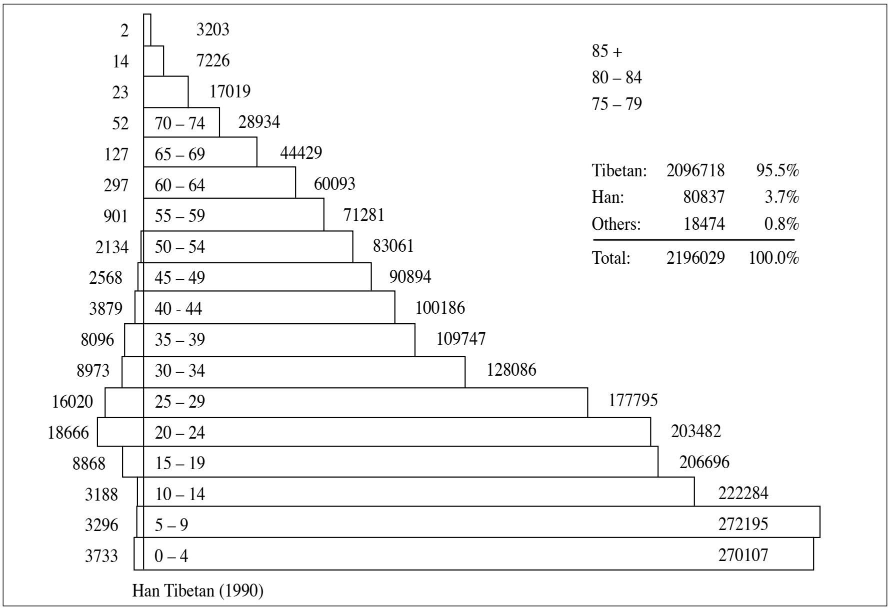


Figure 2.4. The Age Structures of Han and Tibetan Population in the TAR (1990)

needs to be pointed out that these data refer only to those with official residential registration. Temporary migrants were not included.

The Tibetan population has a normal age distribution and no obvious concave that might have resulted from wars, famines or other catastrophic events resulting in high mortality rates. If some massive loss of life actually took place within Tibet in the past, as the Dalai Lama claims it has (in his "Statement of Five Points" he alleged that "over 1 million Tibetans died from unusual circumstances"), there would certainly be suggestions of such in the population pyramid. The relatively larger age group of 5–9 reflects the high fertility rate from 1980 to 1985, which was the first period after the introduction of reforms throughout China and a time when mistakes made in Tibet during the Cultural Revolution were corrected. The more relaxed political environment and the emphasis on economic development and improvement of the standard of living led to fertility growth in many ethnic minority regions. The smaller cohort of age 0–4 indicates some influence of family-planning programs, which started to be carried out in urban areas.

In contrast, the population structure of the Han in the TAR is very unusual, with a large proportion of working-age groups. The two largest age groups were the 20–24 and 25–29 groups. The large gender difference in the Han population in the TAR will be discussed in Chapter 4. Figure 2.4 reflects the fact that most of the Han came from other regions and were dispatched by the central government to work in Tibet only for a limited period of time (generally three years). Some of

them were still single, and most married people left their children and the elderly at home. These government employees would rejoin their families in home regions after their service period in Tibet ended. If it really was the case that "a huge amount of Han in-migrants occupied the home and land of Tibetans (as is often claimed by the Tibetans in exile)," the Han population pyramid would be normal and close to that of the Tibetans, a real pyramid rather than a spindle.

Family-Planning Programs in the Tibetan Areas

There have been various reports about family-planning programs in the TAR. An American doctor, Blake Kerr, claimed that "forced abortion, sterilization, and infanticide are part of birth policies of China in Tibet . . . Tibetans were under threat of being eliminated as a group (*Tibetan Review*, September, 1989)." An article written by John Avedon concluded that "Tibetan farmers and nomads are only allowed to have two children, and extreme forces are used to strengthen theses regulations (*Asia Watch*, Feb. 1988b)." So the three major issues that have been cited in the West as reasons to criticize the Chinese government's population policies are: large numbers of Tibetans dying of abnormal causes, large numbers of Han immigrants in Tibet and reducing or eliminating the Tibetan population by forced birth control.

The family-planning program was re-started in China in the mid-1970s under extreme pressure of rapid population growth. This national policy had a direct impact on the TAR. In February 1975 the Communist Party Committee of the TAR issued a document, "Notice of Serious Enforcement of the Family Planning Programs," resulting in family-planning institutions being established in prefectures and counties throughout the TAR. From 1975 to 1978 the main work carried out by these institutions was to encourage Han residents and Tibetan government employees who married Han to consider family planning. The slogan at that time was "one is not less than normal, two is proper." This campaign was not aimed at urban Tibetan residents or those in rural areas.

The government of the TAR issued the "Temporary Regulations of Family Planning for Han Cadres and Workers Who are Working in the TAR" in December 1979. Starting in January 1980, a quota system was enforced among Han cadres and employees of the TAR government. They were encouraged to have only one child, allowed to have a second child and denied permission to have a third child. This policy was consistent with the national policy of *Wan-Xi-Shao* ("later, sparser and less") (Tien, 1982) in family-planning programs. This policy was enforced until the end of 1982.

In March 1983 the TAR government issued a new document on family planning that included ethnic minorities in the program for the first time. There were four regulations for four different situations: (a) For the ethnic minority

cadres, workers and other government employees and their dependents, "encourage one child per couple, allow a second child but only after a three year interval;" (b) "Urban residents (non-government employees) are also encouraged to have one child per couple, but allowed to have two children without any interval required;" (c) "Farmers and herdsmen living in core areas are encouraged to have one or two children per couple, allowed to have a third child, but the fourth birth should be controlled;" (d) "For border areas and ethnic groups with few people, such as the Monba and Lhoba groups, there will be no family planning enforced (Tanzen and Zhang Xiangming, 1991b: 496)."

A news broadcast in October 1983 claimed that "80 percent of farmers and herdsmen in TAR were already practicing family planning" and this was cited by an American demographer (Banister, 1987: 296). It was too difficult to promote family planning in many low-density rural areas with poor transportation. When family planning was instituted, some local cadres reported inflated figures to bolster their alleged achievements. In my opinion, these reported achievements in many cases did not reflect the true situation any more than did the exaggerated claims of grain production during the Great Leap Forward movement in the 1950s and later similar campaigns.

After 1985 no new restrictions were announced but the TAR government established some new measures to encourage family planning. For example, the government employees (Han, Tibetans and other groups) who went to work in the TAR for a period of time and promised to have only one child (signing a "one child certificate")[6] would receive as much as one-year paid leave for child-rearing (the first six months with full salary, the second six months with 80 percent). Native-born Tibetan government employees who agreed voluntarily to have only two children, with a three-year interval, were eligible for four months of fully paid leave after each of the births (Tanzen and Zhang Xiangming, 1991b: 495–497).

Some western scholars have provided detailed reports about the family-planning programs in the TAR based on their personal field research. Professor Melvyn C. Goldstein is the foremost scholar in Tibetan studies in the United States. Based on systematic and in-depth research of official documents and personal interviews, his publications are widely accepted and the most influential in the field. His field research stated,

> For the Lhasa 'masses', most individuals we spoke to said that they were not sure what the official rules were but that limits were not being strictly enforced . . . In the summer of 1990, a new policy was implemented in Lhasa, which, for the first time, clearly stipulated that the urban 'masses' were permitted to bear only two children per couple, this bringing them into line with the regulation for Tibetan cadre. (Goldstein and Beall, 1991: 294)

It is possible that the policy of urban family planning may have been delayed in implementation for as long as seven years after its announcement in 1983.

After their field research in rural areas, Melvyn Goldstein and Cynthia Beall wrote,

> We found no evidence of any policy restricting the number of children that herding and farming women can bear, although there has been publicity extolling the advantages of family planning and smaller families, particularly in areas near administrative centers. In Phala (a pastoral area in Angren County), some nomads had heard that there were a way to stop getting pregnant, but there was absolutely no pressure to utilize family planning to restrict family size. In fact, one woman with many children actually came to us asking if we could help her obtain birth control 'medicine.' When we looked into this, we found that contraceptive injections were available at the district health post, three days away by horse-back, and that IUDs and sterilizations were done at the more distant county headquarters. During 1986–88, the period of our research there, no propaganda appeared extolling the value of small families . . . Not surprisingly the nomads, including their officials, had large families. The fertility history of Phala's four local Communist Party members (all nomads who joined the party during the Cultural Revolution) reflects this. For the three who are married: the party secretary's wife has had seven children (six are alive), the two (successive) wives of a second official have eight living children; and the wife of the third has had seven births (six living children). These general observations of high fertility are supported by demographic information for all the females in the nomad community. (Goldstein and Beall, 1991: 294–295)

In their survey area (Phala pastoral area), the annual fertility rate was 3.5 percent from 1986 to 1990, higher than the TAR level (2.3 percent) and the national level (2.1 percent). Based on his research of 71 women of child-bearing age in this area, the average number of children was 2.3 for the 20–29 age group, 3.8 for those 30–39, 5.9 for those 40–49 and 6.8 for those 50–59. His research of women of child-bearing age in the Nyare agricultural area indicated that the average number of children was 2.7 for the 20–29 age group, 3.3 for those 30–39, 3.4 for those 40–49 and 6.0 for those above 50 (Goldstein and Beall, 1991: 297, 299).

> The reproductive histories of Phala women at all ages, therefore, provide strong evidence in support of conclusion that no population control policy restricting couples to two births was or is operative. Furthermore, no Phala nomads have ever been levied fines for their third, fourth, fifth or subsequent children, and all such children and their families have full rights in the community. (Goldstein and Beall, 1991: 297).

In Goldstein and Beall's opinion, the information about forced family planning in Tibet came from the Tibetans in exile.

> We suspect that a combination of these possibilities accounts for the reports of alleged abuses collected by Avedon and Kerr, and conclude that the persistence of allegations of pervasive human rights violations in Tibet in the area of birth control reflects not the objective presence of a policy of systematic and coercive birth control in Tibet but rather the highly emotional atmosphere surrounding the struggle of Tibetan refugees and their supporters against the Chinese. The reports appear to be an illustration of how easily strong political emotions can misinform objectivity. (Goldstein and Beall, 1991: 303)

Concerned about population pressure on the economy, they also comment that,

> At current growth rates over half a million Tibetans will be added to the TAR's population in the last decade of this century. These additional people will pose an enormous economic and social burden for Tibet's underdeveloped economy as, for example, a rapid population increase clearly reduces the amount of farm land per capita . . . . (Goldstein and Beall, 1991: 300–301)

In another recent study from 1997 to 2000 Melvyn Goldstein interviewed 780 households in 13 villages in rural TAR. He found that live births averaged 6.9 for married women aged 50–54 and 7.1 for married women aged 55–59 (Goldstein, et al. 2006: 205). It seems that the family planning program still had a very limited impact in rural Tibet in 2000.

Conclusion

Based on the discussions above, several conclusions can be reached about the characteristics of the Tibetan population and its changes:

1. Before 1951 the Tibetan population was in decline. From the late 1950s, more likely the early 1960s, the Tibetan population began to increase, with 1964–1982 a period of rapid growth. After 1982, the rate of growth started to slow. In the early 1950s the Tibetan population in China was about 2.75 million. It reached 3.87 million in 1982, 4.59 million in 1990 and 5.42 million in 2000.
2. The Tibetan population in China can be divided into three parts according to geographic distribution, language dialects and administrative relations in history: Tibet Area, Kham and Amdo. More than half of the total Tibetan population lives in other Tibetan autonomous areas outside the TAR.
3. Apart from those Tibetans who fled to South Asian countries following the Dalai Lama's escape in 1959, there has been no obvious decline in the Tibetan

population since 1951 within counties or as a whole in the TIR. For several counties with a decline in their Tibetan population during 1953–1962, some specialized surveys are necessary to identify the reasons. Very likely they were because of administrative border adjustments or out-migration. No obvious or unusual gaps were found in the age structure of the Tibetan population, which would suggest a sharp population loss.

4. According to the registration records of local administrations, the Tibetan population in the TAR doubled in 42 years, from 1.15 million (assuming 100 percent were Tibetans) in 1952 to 2.64 million in 2008. The annual growth rate was 1.49 percent, similar to the national population growth rate for the same period (1.54 percent). In contrast, other Tibetan-inhabited areas experienced a faster population growth. From 1964 to 1982, the average annual growth rate was 2.1 percent for the national population, 2.2 percent for the Tibetans in the TAR and 2.8 percent for Tibetans in other Tibetan-inhabited areas. From 1982 to 1990, the growth rate was 1.5 percent for the national population, 2.18 percent for the Tibetans in the TAR and 2.29 percent for Tibetans in other Tibetan-inhabited areas. The annual growth rate for the total Tibetan population in China was 1.66 percent from 1990 to 2000.
5. The family-planning program was introduced into the TAR in 1975. Limited family-planning programs have been practiced by Tibetan and other minority government employees since 1983. Actually, there is no evidence that forced birth-control programs were conducted among Tibetan farmers and herdsmen. Because of the TAR's geography and lack of resources, rapid population growth will become a burden socially and an obstacle to economically sustainable development. All the above represent the nature of Tibet as a "peripheral region" compared with the "core area" in China with different demographic dynamic patterns and social policies.

3

The Han Population in the Tibetan-inhabited Areas

There are many unresolved issues surrounding the question of the Han population in the Tibetan areas. How many Han people were there in the Tibetan-inhabited areas of China in the past and how many are there today? When did they move there? What role has the government played in these migrations? What has been their impact on the local social, economic and cultural changes in Tibet? Conflicting answers to these questions have given rise to considerable debate.

When the Tibetans in exile claimed, repeatedly, that about "7.5 million Chinese migrated into Tibet, occupied the home and land of native Tibetans and turned them into a minority,"[1] many western politicians and media accepted this number without question. For example, "In 1959, according to the report of International Commission of Jurists, there were 5 million Han Chinese who migrated into Tibet, about another 4 million Chinese are predicted to migrate into Tibet (Chen Yan, 1959: 73)." Professor Lucian W. Pye, a well-known political scientist at MIT, wrote that "Han migration into Tibet has now reached the point at which Hans outnumber, by possibly two to one, the native Tibetans (Pye, 1975: 497)." The 10th item in the "Amendment about the Tibet Question," passed by the U.S. Senate on October 6, 1987, criticized the Chinese government for its "effort to organize a large-scale population migration, resulting in millions of Chinese migrants moving into the Tibet Plateau. This is obviously an effort to make Tibetans a minority in their homeland." In 1990 some newspapers were contending that the Chinese government "is moving large numbers of Han into Tibet, and the total number of Han will exceed Tibetans in 15 years (*Shijie Ribao* [*World Daily*], Sept. 16, 1990)." According to some accounts, Han migrants have not only become the majority in Tibetan areas, but have also occupied cultivated land and pastures, and exploited other natural resources in Tibet.

The Chinese government, however, keeps refuting the above charges. According to official statements, no farmers or herdsmen were allowed to migrate to Tibet, and there were only small numbers of government employees who moved to the TAR and worked in government institutions for a period of time (Liu Rui, 1988: 140–142).

Given the wide discrepancies in claims what is reliable? From where are the commentators obtaining basic data and evidence to support their arguments? These issues need to be studied in a scientific way using demographic analyses, rather than simply drawing on estimates or rumors. Two issues need to be clarified when Han in-migration in Tibet is discussed. First, whether the same coverage of “Tibet” is being referred to. Second, who is considered a migrant (permanent or temporary residents, spontaneous laborers or government-arranged circular employees). If one side is referring to the TIR and other to the TAR, then numbers will never match each other. If some people are considered as migrants by one side and circular employees by the other, the gap will remain. That is why the geographic coverage of Tibet and the definition of migration have to be clarified in the following discussions.

Only after such clarification can we examine the basic questions in migration studies: Who (age, education, industrial and occupational structures) are these Han in-migrants? Where did they come from? In what kind of work are they engaged in Tibet? What is the duration of their stay in the region? Has their work benefited or hindered the development of Tibet and the basic interests of the Tibetan people? Because these questions can be sensitive, only a careful, systematic study of the Han population in the Tibetan-inhabited areas can arrive at some definitive answers.[2]

Given the paucity of records or other data, the discussion of the history of Han in Tibet will be brief. For the period after 1949 the discussion will be based on an analysis of official registration records and census data. Issues about migration into the Tibet Autonomous Region in recent years will be discussed in detail in Chapter 5.

The Geographic Scope of the Tibetan-inhabited Areas in China

In order to analyze the Han population in the TIA (Tibetan-inhabited areas), the geographic scope of these areas must clearly be identified. When the Tibetan population was discussed in Chapter 2, we explained that the ambiguous concept of Tibet is the main reason for differing estimates of the Tibetan population.

When articles and newspapers in China discuss the Tibetan and Han populations in Tibet, the geographic area they refer to is the TAR, which is about 1.2 million square kilometers. Influenced by the Tibetans in exile, much of the Western media and many Western scholars refer to a “Great Tibet” when discussing the Tibetan and Han populations in Tibet. “Great Tibet” includes the TAR, almost all of Qinghai Province, and large areas in Sichuan, Gansu and Yunnan provinces, totaling about 2.2 million square kilometers.

Asia Watch, which is usually supportive of the Tibetans in exile, in its report on human rights in Tibet, pointed to certain problems in exile claims. It pointed out that “the number of 7.5 million Han Chinese [in the Tibetan areas] provided by the

Tibetan government-in-exile includes the Han living in areas such as Xining City (capital of Qinghai Province). This city has not belonged to Tibetans for centuries and is located outside the autonomous residential areas where various kinds of Tibetans and semi-Tibetans live (Asia Watch Committee, 1990: 74)."

Geographically, as well as administratively, the Tibetan-inhabited areas (TIA) generally refer to the autonomous areas officially established by the central government after 1949. These areas include the TAR, 10 autonomous prefectures, two autonomous counties and one autonomous *xiang* (cf. Figure 2.2). Many of the 10 autonomous prefectures are of mixed ethnicity and some are joint-autonomous prefectures officially. For example, Tso nub (Haixi) in Qinghai Province is a Mongol-Tibetan-Kazak Autonomous Prefecture with only 12.2 percent of its population Tibetans; Hgawa (Aba) in Sichuan Province is a Tibetan-Qiang Autonomous Prefecture. Both are included in this book as a part of Tibetan-inhabited areas. Furthermore, there is a Menyuan Hui Autonomous County (for the Hui ethnic group) under the administration of the Tso chang (Haibei) Tibetan Autonomous Prefecture in Qinghai. This county is also included here for the purposes of calculating the Tibetan population. The Henan Mongol Autonomous County is under the administration of Chub chub (Huangnan) Tibetan Autonomous Prefecture, but because only a few Tibetans (only 863 in 2000) live in this Mongol Autonomous County, it is not included in this study. In addition, Kanlho (Gannan) Tibetan Autonomous Prefecture in Gansu Province had a large Han and Hui population (48.6 percent).

Table 3.1 provides the Tibetan population in each autonomous area that was established for Tibetans and their percentage of the total population of respective administrative units. The numbers in this table can be compared with those in 1953 to see changes from 1953 to 2000 for both Tibetan and non-Tibetan populations in each autonomous area. The total Tibetan population in these autonomous areas was 5,003,001 in 2000 and made up about 92.4 percent of the total Tibetan population in China in that census year. This table also shows that there were five areas with a Tibetan population of less than 50 percent of the total in 2000. Therefore, the coverage of these autonomous areas provides a proper scope for discussion about the Tibetan population.

The "Great Tibet" claimed by Tibetans in exile not only far exceeds the areas managed by the *Kashag* government before 1949, it also exceeds the above autonomous areas designated for Tibetans today. "Amdo province" in their claims includes Xining City and Haidong prefecture in the eastern part of Qinghai Province. The Han have been the majority in Xining City and eastern part of Qinghai Province for centuries; several other ethnic groups (including Hui, Shala, Dongxiang, Yugu, etc.) have also lived in this region for centuries.[3] There was a Han population exceeding 1 million in this prefecture in 1964. According to the 2000 census, there were 96,091 Tibetans in Xining City and 128,025 Tibetans in Haidong Prefecture, accounting for 5.2 percent and 9.2 percent of the local total population respectively

Table 3.1. Tibetan Population in All Tibetan Autonomous Areas (2000)

Tibetan auto. Area	Tibetan Population	Tibetans in total population (%)	Tibetan auto. area	Tibetan Population	Tibetans in total population (%)
TAR	2,427,168	92.8	Ngawa AP	455,238	53.7
Tso chang AP	65,520	25.3	Kantse AP	703,168	78.4
Chub chub AP	141,497	77.6	Dechen AP	117,099	33.1
Tso lho AP	235,663	62.8	Tianzhu AC	66,125	29.9
Golog AP	126,395	91.6	Muli AC	40,312	32.4
Yushul AP	255,167	97.1	Above Total	5,003,001	
Tso nub AP	40,371	12.2	Total Tibetans in China	5,416,021	0.4
Kanlho AP	329,278	51.4			

AP: autonomous prefecture; AC: autonomous county.
Source: Department of Population, Social, Science and Technology Statistics of National Bureau of Statistics of PRC and Department of Economic and Development of State Ethnic Affairs Commission, 2003: 676–686.

(Department of Population, Social, Science and technology Statistics of National Bureau of Statistics of PRC and Department of Economic and Development of State Ethnic Affairs Commission, 2003: 686).

"Great Tibet" also includes central Sichuan Province, an area not within the traditional region of Tibetan habitation. In 2000 the Tibetan population in Sichuan Province was 1,269,120, among which 94.5 percent (1,198,718) lived in two Tibetan autonomous prefectures (Kantse and Ngawa) and Muli Autonomous County (Department of Population, Social, Science and Technology Statistics of National Bureau of Statistics of PRC and Department of Economic and Development of State Ethnic Affairs Commission, 2003: 676). Traditionally these autonomous areas were where the Tibetans had lived for centuries under the direct administration of the Qing governor in Chengdu City.

In this chapter we will follow the defined geographic and administrative scope of the Tibetan inhabited areas, including the TAR, 10 prefectures and two counties. The total area of the TIA is roughly equivalent to the ethnographic Tibet common in Western literature and the relevant literature in Chinese.

The Han Population in the Tibetan-inhabited Areas Historically

To understand the present situation it would be helpful to review briefly the migration and distribution of the Han population in the TAR in particular and the TIA in general.

The history of the Han population in the TAR

Historical statistical records concerning Han and other ethnic groups in Tibet are almost nonexistent. Only very few Westerners and Chinese traveled to Tibet or studied Tibet before 1949 and all we can find are a few numbers, mainly estimates in various publications left by them.

After crushing the Dzungar Mongolian rebellion in 1720, the Qing Dynasty troops entered Lhasa and left two *Ambans* (Commissioners of the Qing Emperor) and 3,000 troops (including Han, Mongolian and Manchu) in Lhasa to defend the area (Grunfeld, 1987: 61–62). In 1728 the Qing troop detachment was reduced to 500. Another record of the Han population in Lhasa was that when the Qing *Ambans* tried to suppress a rebellion led by Gyurme Namgye (the ruler of Tibet at that time) in the late 1740s the resulting conflict led to "several hundred Chinese [seeking] refuge in the Potala under the protection of the seventh Dalai Lama (Goldstein, 1997: 18)." In 1791 Nepali troops invaded Tibet and looted the Tashilhunpo monastery in Shigatse. After they were defeated by the Qing troops in 1792, the Qing general arranged for a force of 3,000 Tibetans and 1,000 Han and Mongol soldiers for local defense (Hong Dichen, 1936: 162). We also learned that "during the Qing period, there were about 2,000 Han residents in Lhasa. People from other groups included about 1,000 Mongolians, 800 Nepalese and 50 Bhutanese. Han merchants numbered usually around 2,000 to 3,000, and most were from Yunnan, Sichuan and Shaanxi (Hong Dichen, 1936: 43–46)."

A British doctor, Thomas Manning, who visited Lhasa in 1811, wrote in his diary that "the central part of Tibet was under the Qing Administration; there was one officer and a small military camp of the Qing government in every town. There were posts that were set up by the Qing administration at certain distances along the post road. There were many Qing soldiers who married Tibetan women and had children . . . there were many Han Chinese in Lhasa; they were merchants, officials, and soldiers (Taller, 1992: 451, 461)."

From these sources we can surmise that Han civilians and other ethnic groups in Lhasa had already formed a significant population in the 18th and 19th centuries; perhaps there were as many as 2,000 to 3,000 Han civilians in Tibet, about 10 to 15 percent of the total number of Lhasa residents at that time. Most of them lived in Lhasa. There were also several thousand soldiers sent by the Qing court, including Manchus and Mongols as well as Han, who lived in towns and at military posts.

In the later years of the Qing Dynasty the administration in Tibet was strengthened. The two Qing *Ambans*, Zhang Yintang and Lianyi, tried to implement a "new administration" policy, establishing schools and printing newspapers in Lhasa from 1906 to 1908. In 1910, 2,000 additional Qing troops reached Lhasa from Sichuan. The Chinese revolution in the following year overthrew the Qing Dynasty and caused severe conflicts among the Qing soldiers in Tibet because some

were royalists and others supported the revolution. Han civilians were also affected by the chaos. "In the fall of 1912, except for the *Ambans* private guards, all Han troops left Tibet through India. The remainder of the Han left by April of 1913. This is the first time in Tibet's history there were no Han in Tibet (Grunfeld, 1987: 90)." A more accurate description is that "in January 1913, Lhasa was free of Chinese troops and officials for the first time since the 18th century (Goldstein, 1989a: 59)." Following the 1911 revolution, only a small number of Han residents still lived in Lhasa and other parts of Tibet.

Bits of information on the Han population appeared in books and articles during the 1920s and 1930s. According to the book *Qinghai and Xikang,* published in 1931, in Kongpo Gyanda County, only 180 miles from Lhasa, 17 of every 40 households were Han (Liu Huru, 1931: 30). Another book estimated that there were "about 1,000 Han households in the Tibet area (about 380 of these were Muslims) who mainly live in cities; they are the officials, merchants, and soldiers who went to Tibet during the Qing Dynasty, mostly from Qinghai and Yunnan. Some of them were killed during the riot after the '1911 revolution.' At that time, there was conflict between two parts of the Qing troops, one supported the new Republic government and another supported the Qing court. As a result, all troops withdrew from Tibet through India and the civilians who remained in Tibet lived under the strict supervision of the *Kashag* government for the next 20 to 30 years. They had to report to the Lhasa government in advance if they wanted to travel more than 50 kilometers from Lhasa, otherwise they would be accused of escaping (Ma Hetian, 1947c: 585)."

The Chairman of the Commission for Mongolian-Tibetan Affairs of the Republic of China, Huang Musong, went to Lhasa in 1934 to attend the memorial service for the death of the 13th Dalai Lama. One of the issues he discussed with the *Kashag* involved Han living in Tibet. Item 14 on his list of discussion issues was a request that "all half-Chinese in Tibet should be under the sole jurisdiction of Chinese officials in Lhasa." The *Kashag* refused by replying: "In 1912, the Tibetan Government asked all Chinese to return to China. Those born in Tibet asked for permission to remain and signed an agreement to pay taxes and submit themselves to Tibetan jurisdiction." The *Kashag* went on, according to another document, to tell Huang that "all Chinese people who have resided in Tibet and have been under the jurisdiction of the Agricultural Office shall remain governed by the laws of Tibet," and the representatives of the Chinese government shall exercise no control over them (Goldstein, 1989a: 237, 240).

In 1939 the new Chairman of the Commission for Mongolian-Tibet Affairs, Wu Zhongxin, attended the enthronement ("seating ceremony") of the 14th Dalai Lama in Lhasa. An office of the Commission was established in Lhasa. According to documents, some of the discussions between the *Kashag* government and the Han officials of this branch, in August and October of 1942, were related to the legal

disputes concerning residents born from Han-Tibetan intermarriages (Goldstein, 1989a: 383–384). The new Han officer (Shen Tsung-lien) was very mindful of improving Han-Tibetan relations. "He maintained an altar in his house, engaged in Tibetan Buddhist rites, consulted oracles, entertained all the Chinese monks . . . encouraged Chinese traders to make generous gifts to monks," and "he did not contest Tibetan jurisdiction over cases involving Chinese half-castes (Goldstein, 1989a: 530–531)."[4]

The issue of Han residents was raised in a letter from the Tibetan National Assembly to the Chinese National Congress in the 1940s in which it was asserted that "resident Chinese traders (in Tibet), confident of the support of Chinese officials, are creating tensions and disputes over petty matters with callous disregard for Tibetan laws (Goldstein, 1989a: 541)." A book written by a Kuomintang officer in Lhasa said there were about 500 households and more than 2,000 Han in Tibet, and that three-fifths lived in Lhasa (Wang Lixiong, 1998: 276). These reports from both the Tibetans and the central government tell us there were a number of Han monks, merchants, residents and some half-Han residents, even some Han farmers, under the supervision of Tibet's "Agricultural Office."[5]

The research reports from the Lhoka area of the TAR also provide some descriptions of the Han population before 1949.

> There were many Han in Zetang and other areas in Lhoka in the past; most were merchants who had their own organizations and were not under the administration of Luoji, the Lhoka governor. A division chief of the Kuomintang government office in Lhasa went to Zetang to call a meeting of all Han residents and organized them into the Bao-Jia system that existed in all the Han regions. He appointed Yang Huanxin as the leader to manage Han affairs. He also asked residents to follow local laws and regulations; otherwise they would be punished by this organization. All important events were to be reported to the Chinese Mission of the Kuomintang government in Lhasa. The Han built a temple (to worship Guan gong) at the western edge of Zetang town through the donations of over 30 local Han residents. Tibetans call it Jia la kang (temple of the Han). Some Hui residents from Gansu were also under the administration of the Han. (CTRC, 1992: 12–13)

Clearly there were some Han living in some parts of Tibet outside Lhasa throughout the first half of the 20th century.

From the limited records cited above we can speculate that the non-Tibetan population (mainly Han Chinese) in Tibet before 1949 could be divided into several groups: (a) officials and soldiers of the central government (the Qing Dynasty and the Republic of China), (b) merchants in cities and towns, (c) servants, gardeners and handicraftsmen, and (d) monks studying Tibetan Buddhism. Although their

numbers were not large, they maintained the administrative, economic and cultural connections between the Tibetan and Han regions.

In July 1949, when the Kuomintang government was on the verge of defeat in the civil war, the *Kashag* government sent troops to occupy the Chinese Mission in Lhasa, deporting all Han officials and their families to India by force. Apart from these officials, "another 300–400 individuals, mostly Chinese, who had been identified . . . as spies [were] expelled at the same time (Goldstein, 1989a: 614)." When the PLA troops moved toward the Tibet plateau in 1949, most Han residents were expelled by the *Kashag* government from Lhasa along with some Tibetans who were thought to be sympathetic to the Han Chinese. The number of Han living in Lhasa after these events was probably no more than a handful. In the above discussions, "Tibet" refers to the area controlled by the *Kashag* government, and corresponds roughly with the TAR today.

The Han population in other Tibetan-inhabited areas

The other Tibetan-inhabited areas in Gansu, Qinghai, Sichuan and Yunnan had a long history involving greater social, economic and cultural contact with the Han regions because of their geographic proximity. Many Han merchants, artisans and farmers routinely entered the Tibetan areas for various economic activities. They lived with local Tibetans and, at times, intermarried. "Since the movement of *Gai tu guei liou* (changing the hereditary *Tusi* system into an appointed officer system) in the late Qing Dynasty, many Han from Yunnan, Sichuan and Shaanxi migrated to the Kham (eastern part of Tibet areas). Local Tibetan residents in the Kham areas were also influenced by Han culture and maintained close relations with the Han, leading to intermarriages . . . Han soldiers were allowed to maintain their families in military camps and were provided grain, so many soldiers married Tibetan women. In recent years, more and more Han and Tibetans have learned languages from each others and that has resulted in more Han-Tibetan intermarriages (Hong Dichen, 1936: 54)."

The 1911 revolution ended Qing rule. The Kham area that had long been governed directly by the Sichuan Governor was now turned into a Xikang Administrative District in the same year. The Xikang Administrative Commission was established in 1928, and Xikang Province was established in 1939, incorporating 32 counties. Under this administrative system, the number of Han farmers and craftsmen who entered the Tibetan areas increased significantly. Kangding (Tardo) was an important town in the Kham area and it became the capital city of Kantse Tibetan Autonomous Prefecture. "It is the center of Sichuan-Tibet trade; among a total of 40,000 residents, about 60 percent are Han and 40 percent Tibetans (Liu Huru, 1931: 30)." "Kangding Love Song" was the most popular folk song in China in the 1930s

and is still popular today. Some reports claimed that in the 1920s the Han population in the Kham area grew to the point that it exceeded Tibetans in some towns. In the Ngawa (Aba) region of Kham, some counties (Aba, Ruoergai, Rangtang) remained "pure" Tibetan residential areas, and some counties (Naping, Chuosijia) maintained a majority Tibetan population, while some counties (Songpan, Situ, Dajin, Xiaojin, Luhua, Pingwu, etc.) had a Han majority. The total Han population in the Kantse region was estimated at 82,000, 15.2 percent of the total in 1954 (Sichuan Editing Group, 1985b: 1; 1985a: 2, 20–21).

Qinghai Province was established in 1929. Incomplete records show there were 318,000 Han in Qinghai in 1937 (Zhou Zhenhe, 1938: 47). Another study suggested 344,000 Han in 1947 with about 11.7 percent of the total living in Xining City (110,000) and several eastern counties: Ledu (65,000), Huzhou (57,000), Datong (51,000) and Huangyuan (20,000) (Ma Hetian, 1947a: 215). The records for the Han population in Tibetan areas in Gansu and Yunnan provinces vary according to areas. The total population of the Tianzhu Tibetan Autonomous County in Gansu before 1947 was 75,452 residents: Tibetans made up 18.6 percent (14,012) and Han 77 percent (58,111) (Editing Group of *General Situation of Tianzhu Tibetan Autonomous County*, 1986: 37).

From the above information and estimates only a rough picture can be discerned about the general size of the Han population in these traditional Tibetan areas of inhabitation. These numbers may not be reliable but because they were at least published at that time, they are introduced here for historical reference.

The Han Population in the TAR and Other Tibetan-inhabited Areas since 1949

To examine the Han population changes in the TAR and other TIA over time, two points need our attention once the geographic scope has been clarified. First, the goals and criteria for establishing autonomous areas for ethnic minority groups need to be discussed in order to understand why these autonomous areas were established. Secondly, the ethnic structure of the populations in the TIA should be clarified so that the changes in these structures can be examined.

The system of autonomous areas for ethnic minority groups is one of the basic policies of the People's Republic of China. The criterion was that "under unified national leadership, the relevant autonomous areas should be established based on the areas where ethnic minorities live in compact communities (Ma Yin, 1984: 15)." In clarifying "the areas where ethnic minorities live in compact communities," the main criteria were the absolute size of the ethnic minority population and the extent of residential coherence, not the percentage of these ethnic minorities of the total population in these areas. Therefore, when the members of a minority group live

coherently in a county, an autonomous county might be established for this group even if its members comprise only a small percentage (just above 10 percent) of the total population of that county. Consequently, that ethnic minority group will then have a leading voice in the local administration of the autonomous area. The interests of minority residents will be fully considered, not only secured by their role in the power structure, but also by the favorable national policies toward autonomous areas in reducing or exempting taxation, special financial subsidies, priorities in investment and development programs (for example, infrastructure, health care, education and irrigation).

At the same time, the setting of autonomous areas should meet the goals of the national policies to "benefit the cooperation among ethnic groups and to reach the common prosperity of all ethnic groups (Ma Yin, 1984: 15)." When the decisions were made to establish autonomous areas (how to set up their boundaries, whether it will be an autonomous area inhabited jointly by several groups, etc.), there were many factors that influenced the final decision. Because there have been many migrations in history and many groups actually live in mixed populations, autonomous areas usually include members from more than one ethnic group.

For example, when the Guangxi Zhuang Autonomous Region was established, it could have been established in the western part of the former Guangxi Province where most Zhuang lived if the ethnic structure of local populations was the major concern. Former premier Zhou Enlai emphasized that "if the autonomous area were established in the region where Zhuang were concentrated, that area would be isolated from more developed Han areas, and that would not benefit its future development (He Longqun, 1994)." Considering the future of social and economic development for the whole region, the central government decided to turn the whole former Guangxi Province into an autonomous region with the Han comprising 62 percent of the total population, even ceding a part of Guangdong Province to this new autonomous region so it could have a harbor. Another example is Inner Mongolia. A Mongolian, Wulanfu, was one of the earliest members of the CCP and became one of the top leaders in the central government in 1949 with very strong influence. When the Inner Mongolia Autonomous Region was established it covered a large expanse, including many Han areas. He lost power during the Cultural Revolution and the eastern and western parts of Inner Mongolia came under the administration of other provinces. This change came about mainly because of concern about possible war with the Soviet Union during the border cold war. When Wulanfu returned to power after the Cultural Revolution, those areas returned to Inner Mongolia. There were many other examples to show how central and local leaders decided the structure and boundaries of these autonomous areas in China, and there were many debates on the process of "recognition" of "ethnic nationalities" and establishment of autonomous areas (Ma Rong, 2004: 89–95).

There have been many estimates of the Han population in the TIA between 1958 and 1987 (cf. Table 3.2). These calculations vary from 50,000 to 12 million, with a large proportion around the 4.5 million mark. In 1965 two European newspapers (*Le Figaro* and *the Daily Telegraph*) estimated the population to be between 250,000 and 9,000,000. Because there were no clear geographic references for these estimates, it is hard to compare one with another. One reason for the higher figures may be due to the inclusion of Xining City and Haidong Prefecture in Qinghai Province, where Han have lived as the majority for centuries.

Table 3.2. Estimates of Han Population in the Tibetan-inhabited Areas

Sources	Date of Estimates	Estimated Han population (in 10,000)
Tingfu F. Tsiang (Taiwan)	1958	30
Noel Barber	1959	450
P. Trikam Das	1959	500
The Dalai Lama	1959	550
Lowell Thomas, Jr	1959	580
Wadi Rufail	1959	600
Wallace Liu	1960	30
Hugh Richardson	1960–1961	5
Bradford Smith	1961	1200
Rev. Nhawang Thubtob	1965	20
George Patterson	1965	500
Le Figaro (Paris)	1965	25
Daily Telegraph (London)	1965	900
Indian military officer	1966	3 times number of Tibetans
Lucien Pye	1975	2 times number of Tibetans
The Dalai Lama	1987	750

Source: cf. Grunfeld, 1996: 252.

In fact, the Han population increased generally at a low rate in the Tibetan-inhabited areas from 1953 to 1990, mainly because of the harsh climate. Traditionally, peasant migrants, who cultivate new lands for farming, have accounted for a large volume of migration in China. The climate in the Tibetan Plateau makes agricultural expansion difficult. The growth of Han mainly took place on the margins of the Tibetan Plateau in Qinghai, Sichuan and Gansu, where the climate is similar to that in Han regions (Table 3.3). In-migration of Han peasants to the margins of the Tibetan Plateau was the main reason for this increase. In comparison, the Han population in the TAR for the same period increased only to a limited extent, and decreased after the 1980s because of out-migration. The recent increase of Han

in the TAR since the 1990s has been due largely to temporary migration to Lhasa and towns in the TAR, where booming tourism has created many opportunities for business and services.

Table 3.3. Han Population in the Tibetan-inhabited Areas Reported in Census (in 10,000)

Areas	1953	1964	1982	1990	2000
The TAR	0.0	3.7	9.2	8.1	15.9*
6 AP in Qinghai	4.0	30.6	50.4	53.2	49.5
(Tso nub-Haixi AP alone)	(2.7)	(8.7)	(21.3)	(23.7)	(24.2)
1 AP, 1 AC in Gansu	15.5	23.7	37.5	40.3	40.6
2 AP, 1 AC in Sichuan	20.3	36.6	52.0	45.5	40.0
1 AP in Yunnan	2.8	3.3	5.0	5.1	5.8
Total Han population in above areas	42.6	97.9	154.1	152.2	151.8

AP: autonomous prefecture, AC: autonomous county.
* The Census data included temporary migrants.
Source: calculated from national census data.

According to official reports of the *Kashag* Government in 1953, the total population under its administration was one million. The Chamdo Region, under the control of the central government, reported a population of 274,000. There were no Han reported in either area in 1953. It is difficult to believe that there was not a single Han resident there, since both Lhasa and Chamdo had a long history of Han residents. But it might be true that the Han population was very small at that time.

The Han population rapidly increased in all Tibetan autonomous areas from 1953 to 1982, then increased in some areas (in Qinghai, Gansu and Yunnan) but decreased in Sichuan from 1982 to 1990 because of out-migration when coastal areas provided more opportunities for Han labor under the new reform policies. From 1990 to 2000 the Han population increased in the TAR and Yunnan but decreased in Tibetan autonomous areas in Qinghai and Sichuan because of out-migration (Table 3.3). During the whole period of 1953 to 2000 (from the first to the last census), the Han population in the Tibetan-inhabited areas increased from 426,000 to 1,518,000 (3.6 times) while the Tibetan population increased from 2,753,000 to 5,416,021 (two times). The number of Han (158,570) in the 2000 census in the TAR included temporary migrants who went to Lhasa and other towns for business and job opportunities when tourism developed rapidly in the TAR, while the residential registration records, listing the Han with an official residential registration, showed only 72,122 in 2000 (SBT, 2003: 33).

Since the introduction of economic reforms and rapid economic development in coastal areas, many Han have migrated from western China to the coastal provinces in search of new opportunities. The years 1981 to 1982 can be seen as a turning point in the migration trends of Han farmers: rather than moving westward they went eastward. It is safe to say that from 1980 to 2000 permanent-resident Han were moving out of Tibetan-inhabited areas. Han in-migration then gradually increased after 1994 largely due to "temporary or seasonal migration." Following this migration pattern many Han (as well as some Hui and other groups) go to cities and towns in the TAR and other Tibetan areas in summer searching for jobs or business opportunities and return to their places of origin in winter. They are temporary migrants because most of them do not intend to settle permanently in Tibetan areas, and they go to Tibetan areas for seasonal work. They are not allowed permanent-residential registration and are not counted in annual registration data.

The migration into the TAR (Table 3.4) demonstrates this new trend. It is clear that out-migration was generally higher than in-migration in the 1980s. From 1965 to 1979 the total net migration (the in-migration minus out-migration) was 176,500; the net migration was -72,500 from 1980 to 1992. Since 1993 the net migration numbers have been in positive territory again, especially since 2001.

Table 3.4. Inter-provincial Migration in the TAR (in 10,000)

Year	Net-migrant*	Year	Net-migrant*	Year	Net-migrant*
1965	1.23	1980	– 0.08	1995	0.52
1966	1.36	1981	– 3.06	1996	0.85
1967	2.00	1982	– 1.91	1997	0.82
1968	1.64	1983	– 0.34	1998	0.50
1969	1.43	1984	– 0.74	1999	0.34
1970	0.89	1985	– 0.18	2000	– 0.84
1971	1.84	1986	– 0.37	2001	2.06
1972	1.43	1987	0.53	2002	0.20
1973	1.09	1988	0.01	2003	1.84
1974	0.66	1989	– 0.53	2004	2.03
1975	0.44	1990	– 0.86	2005	2.20
1976	0.86	1991	– 0.23	2006	1.13
1977	0.57	1992	– 0.21	2007	3.10
1978	0.64	1993	0.02	2008	3.03
1979	1.57	1994	0.20		

* (Net migration = in-migrants — out-migrants).

Sources: *Almanac of China's Population (1985)*, p. 546; SBT, 1995: 40; 1999: 31–32; 2000: 30; 2009: 30–31.

Table 3.5 provides the Han population by year according to local residential registration. PLA and Han officials entered Tibet in 1951. The roads that connect Sichuan and Qinghai to the TAR were completed in 1954, greatly improving transportation. The number of Han indicated in 1956 includes laborers sent by the central government to work in the TAR. According to government records, there were 17,631 Han employees and 12,673 Tibetan employees working for the government in 1956. There were no records for other Han residents in TAR. Before the early 1980s very few people were allowed to travel and stay in the TAR without official permission. Therefore, the registration records reflect the real Han population size in the TAR. After the Chinese government started to practice "system reform and opening up" policy, Han businessmen and laborers began to enter the TAR. These people are not covered by residential registration, but are covered by the census. Therefore, comparing registration data and census data is a way to estimate the number of temporary migrants without formal registration in certain areas.

Table 3.5. The Registered Han Residents in the TAR

Year	Han population	% of total	Year	Han population	% of total
1956	17631	-	1992	66318	2.94
1957	2100-2200	-	1993	64890	2.84
1964	36700	2.93	1994	65749	2.83
1978	112569	6.46	1995	67772	2.88
1980	122356	6.60	1996	68725	2.87
1981	99873	5.37	1997	69205	2.85
1982	91720	4.85	1998	73841	3.01
1983	79650	4.12	1999	70145	2.83
1984	76322	3.88	2000	72122	2.87
1985	70932	3.56	2001	77003	3.03
1986	72340	3.57	2002	85166	3.33
1987	78804	3.79	2003	105379	4.07
1988	79871	3.76	2004	93306	3.54
1989	74989	3.47	2005	104647	3.91
1990	67407	3.09	2006	-	-
1991	65101	2.94	2007	110429	4.04
			2008	123558	4.43

Sources: Liu Rui, 1989: 140–141; SBT, 1994: 68; 1999: 35; 2000: 33; 2009: 33.

A more in-depth analysis shows that from 1965 to 1994 the total net in-migration was 98,500 while the total net increase of the Han population was 29,032. That means that during this period, out of the total 98,500 net in-migrants, 69,500 (or 70.6 percent) were mainly ethnic Tibetans from other regions. The characteristics of inter-provincial migration of the Tibetan population indicate a two-way flow: (1) about 70,000 Tibetans moved from other Tibetan areas into the

TAR; (2) some Tibetans moved into eastern Han regions. From 1982 to 1990, the Tibetan population increased by 7,000 in other provinces outside the TIA. In 2000, 404,588 Tibetans lived outside the TIA. The above numbers were counted based on the census data of the TAR and other provinces in China. Table 2.1 provides detailed data of the distribution of Tibetans in all provinces and autonomous regions in China according to five censuses conducted from 1953 to 2000.

The land reform carried out in the Chamdo region in 1957 unnerved senior monks, aristocrats and other serf owners in Tibet. To avoid conflict with the *Kashag* government and the Dalai Lama, "the central government decided that land reforms would not be enforced in Tibet during the second five-year plan (1957–1962) and the number of government employees should be greatly reduced. It was decided that only 1,500 to 1,600 cadres and 500 to 600 workers should remain in the TAR and the rest would return to Han areas (Liu Rui, 1988: 140–141)." This is the reason for a reduction in the Han population from 17,631 to 2,100 (or 2,200) from 1956 to 1957.

When the Dalai Lama fled to India in 1959 the administration in Tibet was re-established to parallel that in the Han regions. The second stage of the diffusion model started. Government bureaus, institutions, hospitals, schools, post offices, factories, banks, shops, etc. (in other words the whole social system of the core part of China) were introduced by the central government to the TAR. Han officials, technicians and workers were transferred to Tibet to work in these institutions and that led to a large increase in the Han population during the 1960s and 1970s, leading to a peak of 122,356 in 1980 (6.6 percent of the total population) (Figure 3.1).

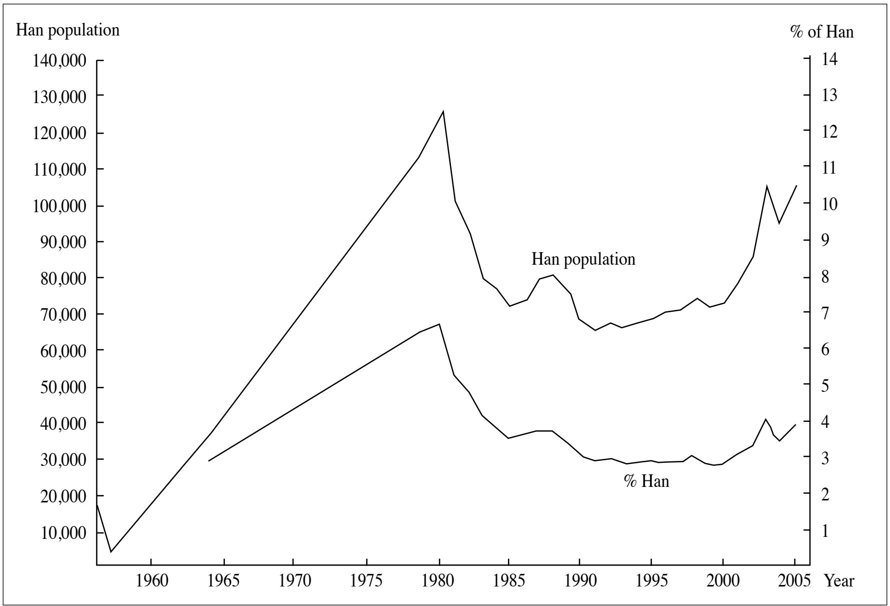


Figure 3.1. Changes in the Registered Han population in the TAR (1956–2005)

At the First Tibet Work Conference (1980), the central government decided to withdraw Han cadres and workers and make Tibetans the majority in administration and government institutions in the TAR (Goldstein, 1997: 63–65). Hu Yaobang, the Secretary-general of the CCP, visited Tibet in 1981 and called for local Tibetans to play a major role in the administration. In August 1980, the central government issued a document stating that "among all (Han) cadres and workers in the TAR, the majority will withdraw from the TAR in terms and period, except for a few key leaders and technical professionals (Tanzen and Zhang Xiangming, 1991: 437–438)."

The Han population fell to 91,720 in 1982 and 79,650 in 1983 in the TAR. Because there were very few temporary Han migrants at the time, this reduction reflected the withdrawal of Han cadres and workers from the TAR. The number dropped to 67,407 in 1990 and the 1990 census reported 80,837 Han including temporary migrants. Since then, the number of registered Han residents in the TAR has remained between 64,000 and 105,000, comprising about three to four percent of the total population. Because of natural increase and in-migration of Tibetans from other areas, the percentage of Han decreased even though their absolute numbers remained the same.

The Geographic Distribution of the Han Population in the Tibetan-inhabited Areas

From 1953 to 1990 the Han population in the TIA increased by 1.1 million. But the rate of increase varied greatly by region. For a more in-depth understanding of the distribution patterns, the Han population, as reported in the censuses and their percentages of the total populations, were calculated by county (Table 3.6). Based on these calculations, Figures 3.2, 3.3, 3.4 and 3.5 present the percentages in all counties within the TIA in the 1953 (without the TAR data), 1982, 1990 and 2000 censuses.

Table 3.6. Percentage of Han in Total Population in Tibet Autonomous Areas by County

Han	1953		1964		1982		1990		2000	
Population (%)	# County	%	# County	%	# County	%	# County	%	# County	%
< 5.0	112	77.2	86	57.7	112	77.2	86	57.7	77	53.1
5.1–10.0	5	3.4	12	8.1	5	3.4	12	8.1	23	15.9
10.1–30.0	13	9.0	20	13.4	13	9.0	20	13.4	23	15.9
30.1–50.0	4	2.8	6	4.0	4	2.8	6	4.0	10	6.9
> 50.0	11	7.6	25	16.8	11	7.6	25	16.8	12	8.3
Total	145	100.0	149	100.0	145	100.0	149	100.0	145	100.0

Source: five censuses data.

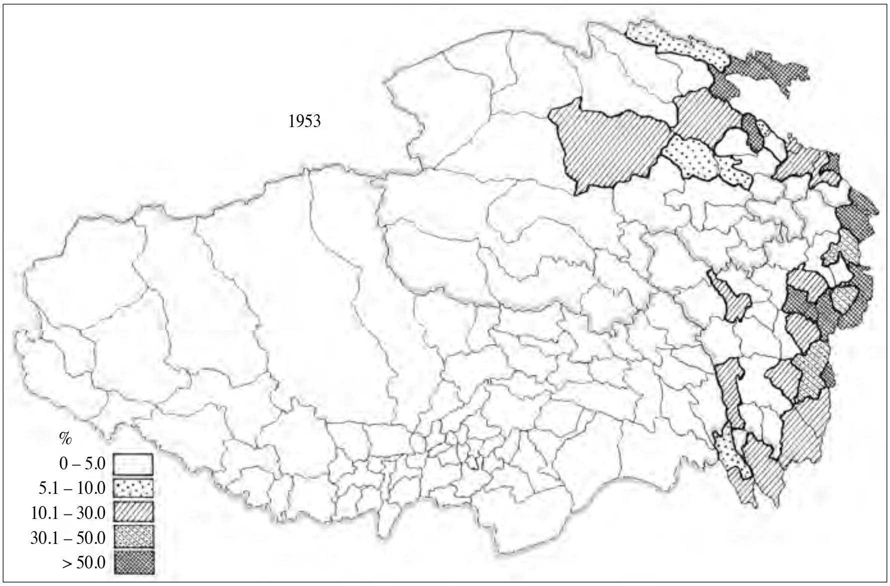


Figure 3.2. Percentage of Han in Total Population by County (1953)

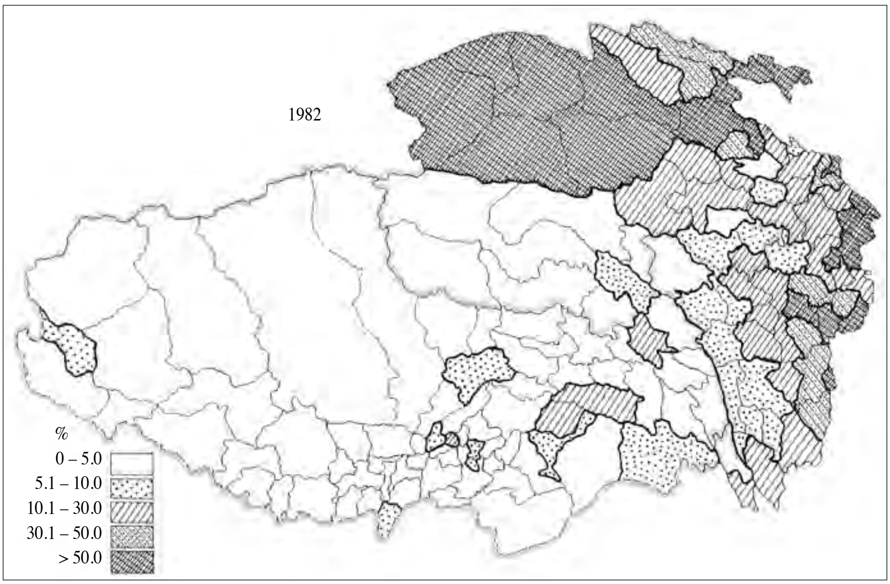


Figure 3.3. Percentage of Han in Total Population by County (1982)

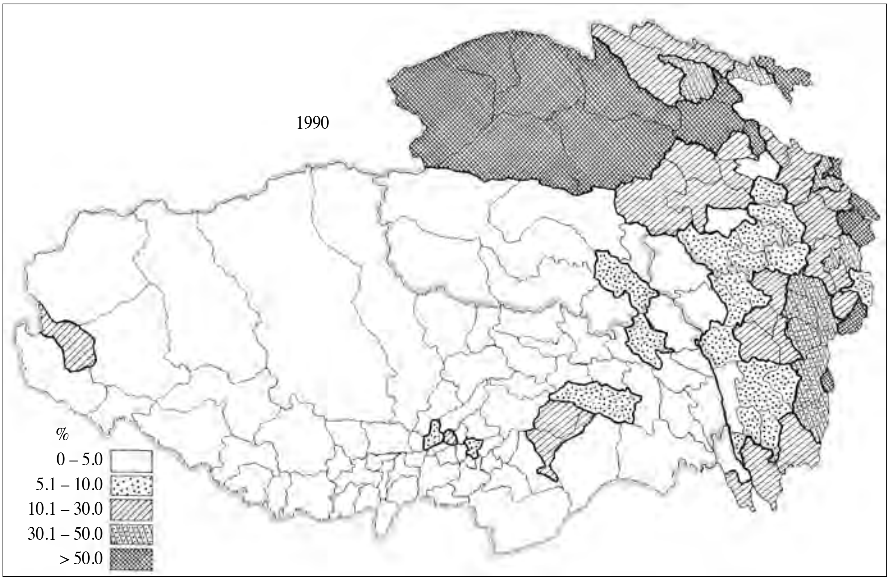


Figure 3.4. Percentage of Han in Total Population by County (1990)

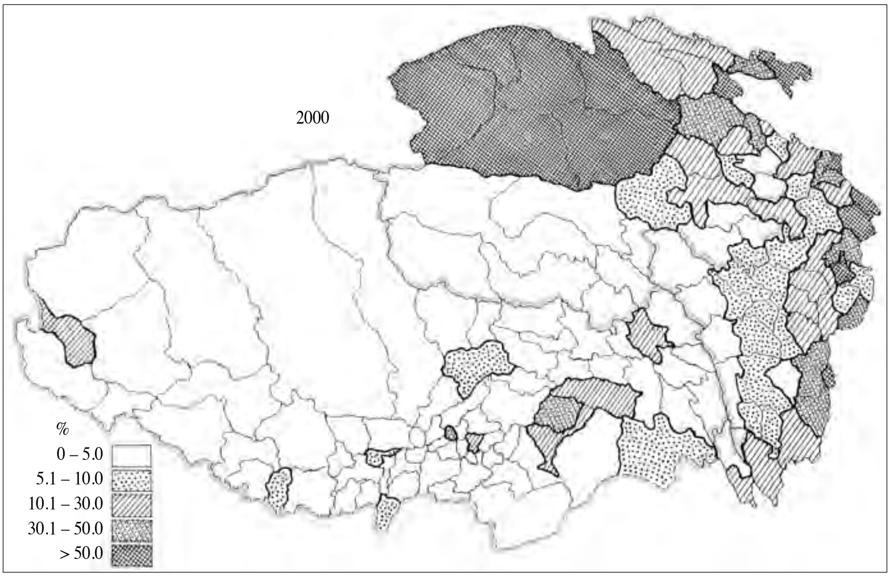


Figure 3.5. Percentage of Han in Total Population by County (2000)

In 1953 the percentage of Han was less than five percent in 112 of the 145 counties in Tibetan areas (77.2 percent of the total counties). Of the 11 counties with a majority Han population, all were in areas adjacent to traditional Han regions (eastern Qinghai, western Sichuan). In 1964 the number of counties in this category rose from 11 to 25 mainly in Qinghai while the number of counties with populations of less than five percent Han fell from 112 to 86. These indicated an increase in the numbers of Han in Tibetan areas. From 1964 to 1982, the number of counties with Han accounting for less than five percent of the total population increased while the number of counties with more than 50 percent Han fell. The number in both categories returned to the same as in 1953, indicating the Han out-migration in this period. The Han percentage decreased in 10 counties. For example, the Han percentage decreased from 11.3 percent to 6.3 percent in Batang County, and it decreased from 61.0 percent to 18.7 percent in Maowen County during this period.

The period 1982 to 1990 was marked by an increase in the percentage of Han, partly due to in-migration. The dissolution of communes in 1982 immediately encouraged Han farmers in Sichuan and Qinghai to move to nearby Tibetan areas. But when the job markets in coastal areas opened to them, they turned toward the east for better opportunities. That is why growth in the 1980s was followed by a fall from 1990 to 2000 from 25 to 12 in counties with a Han population of more than 50 percent. The change was due partly to a higher fertility rate for Tibetans, and partly to out-migration by Han attracted to prosperous coastal areas in the east. The data from five censuses show clearly the up-and-down waves of Han population in Tibetan areas.

In general, the absolute size of the Han population in TIA quadrupled from 0.426 million to 1.76 million from 1953 to 2000. This increase can be observed in most Tibetan-inhabited counties. For example, the Tso nub (Haixi) Mongol-Tibetan-Kazak Autonomous Prefecture in western Qinghai, with vast deserts and salt lakes, had a population in 1990 of only 27,000 despite its huge area of 329,000 square kilometers. To develop salt and other mineral resources, five new counties were established in the late 1950s and the population rose to 87,000 in 1964. Given the low density of the local population, the new Han in-migrants became the majority in the new counties. Even in 1990 the population density was still extremely low in this desert area: 0.9 persons per square kilometer in Tso nub (Haixi) Autonomous Prefecture.

Han population growth also had to do with development projects, such as the construction of the Xining-Gormo railway, which absorbed Han laborers in low-density areas, As the terminus of this railway, Gormo City had a population of 70,000 in 1982. It included about 10,000 railway employees and their families, 16,000 workers in state farms and about 10,000 employees working for geological and hydrological prospecting and construction works. The Office of the TAR in Gormo and its three transportation teams had 25,000 employees and their families.

Taken together these 60,000 people made up 86 percent of the total population of Gormo. In 1990 1.54 million tons of goods for production and consumption were transported into the TAR through this railway-highway system. Han consisted of 84.5 percent of the Gormo population in 2003 (Seng-ge and Ma Baolong, 2007: 110).

On the other hand, the Han population declined in some high-density areas where native populations increased. Moreover, from 1982 economic reform and rapid development created many new opportunities in the coastal areas, which attracted a large number of Han, especially those with skills and work experience, from western China including the TIA. For example, the Han population in Haidong Prefecture (eastern Qinghai) declined from more than one million in 1964 to 783,893 in 2000.

High fertility rates among Tibetans and the decreasing number of Han combined to lead to the further decline of the percentage of Han in the 1980s (Table 3.7). From 1982 to 1990, the percentage of Han decreased in 128 counties out of the total of 147 (87.1 percent). The percentage of Han decreased in 60 of the 72 counties in the TAR, in 30 of the 32 counties in Sichuan, and in 27 of the 32 counties in Qinghai. By 1990, in 51 counties of the TAR, the percentage of Han declined to below one percent (71 percent of the total TAR counties). From 1990 to 2000, following the new development projects in the TAR, the percentage of Han increased in 65 counties. In contrast, the percentage of the Han population in other Tibetan autonomous areas (Qinghai and Yunnan) continually decreased in the 1990s, largely due to out-migration aimed at coastal regions.

Comparing Figures 3.4 and 3.6, changes in the geographic distribution of the Han are clear. The TAR counties that showed an increase in the Han percentages were the areas with higher economic development, such as Milin, Gongga, Sangri, Nielamu and Gere. It is noteworthy that the Han percentage decreased in many administrative centers. For example, the percentage of Han in the Urban District of Lhasa (at the county level in the administrative system) decreased from 36.8 percent to 28.9 percent from 1982 to 1990, in Shigatse from 4.8 percent to 3.78 percent, in Chamdo from 14.5 percent to 6.1 percent, in Zetang (Gatong County) from 8.6 percent to 7.9 percent, and in Hakchu from 6.6 percent to 3.4 percent. These are the administrative centers at the prefectural level. These data indicate that the absolute number of Han employees working in administration and government institutions decreased from 1982 to 1990, then increased from 1990 to 2000. The percentage of Han who were "leaders of government and governmental institutions (different from office staff and professionals)" in the TAR decreased from 9.1 percent in 1982 to 8.4 percent in 1990, then further decreased to 6.1 percent in 2000 (Table 4.5). The increase of the Han percentage from 1990 to 2000 in census results is due mainly to the growth of temporary Han migrants.

Table 3.7. The Changes in the Percentage of Han in County Population in Tibet Autonomous Areas (1982–2000)

Province/Region	**1982–1990**			
	Increase	No change	Decrease	Total
TAR	9 counties	3 counties	60 counties	72 counties
Sichuan	2 counties	0 county	30 counties	32 counties
Qinghai	5 counties	0 county	27 counties	32 counties
Gansu	0 county	0 county	8 counties	8 counties
Yunnan	0 county	0 county	3 counties	3 counties
Total # of county	16 counties	3 counties	128 counties	147 counties
Total %	10.9	2.0	87.1	100.0

Province/Region	**1990–2000**				
	Increase	No change	Decrease	Data missing	Total
TAR	65 counties	0 county	7 counties	1 county	73 counties
Sichuan	4 counties	0 county	28 counties	0 county	32 counties
Qinghai	2 counties	0 county	26 counties	0 county	28 counties
Gansu	1 county	0 county	8 counties	0 county	9 counties
Yunnan	1 county	0 county	2 counties	0 county	3 counties
Total # of county	73 counties	0 county	71 counties	1 county	145 counties
Total %	50.3	0.0	49.0	0.7	100.0

Source: census data.

In other Tibetan-inhabited areas outside the TAR, the counties that experienced a decrease of Han were mainly in those areas abutting Han regions. The comparison between Han density changes during the census intervals clearly shows the pattern (cf. Figures 3.2 to 3.5). Out-migration was the main reason for such declines. Under the system of a planned economy from the 1950s to1970s, Han farmers could not enter cities and take on non-agricultural jobs. Neither could they change their registration status as "rural residents," which is why some of them searched for land resources in nearby Tibetan areas.

During the transition to a market economy since the 1980s, some Han farmers have left rural areas to search for better-paid opportunities in cities and coastal regions. But because they work in cities and coastal regions as temporary migrants, detailed data are not available for various reasons: their positions are not stable and many of them do not provide information (their places of origin and ethnic status) to the local authorities where they work. Millions of Han laborers work in cities and coastal areas, but in published census results there is no way to distinguish who came from the TIR and who came from other Han provinces. For the similar purpose of obtaining higher incomes, some of these Han living in marginal areas of the Tibetan Plateau moved to Lhasa and other towns in the TAR. Temporary migration to the TAR will be discussed in Chapter 5 based on recent survey results.

Characteristics of the Han Population in the Tibetan Autonomous Areas

An analysis of the age structure is helpful in understanding the nature of a population. In general, the Tibetan population is a normal pyramid (cf. Figures 4.1 and 4.2). In comparison, the age structure of the Han population in the TAR in 1990 was unusual. First, the largest age groups were between 15 and 39 years old, especially between 20 and 24, and the number of males was three times that of females. The majority of the Han in the TAR were young cadres, doctors, teachers and engineers (mainly males) who were there under government auspices to work for a period of time. A large proportion of them were young, and either unmarried or had left their family at home. They planned to return home after completing service terms of three years. If large numbers of Han in-migrants occupied the lands of the native Tibetans, as the Tibetans in exile claimed, the majority of these Han would be farmers with families (the elderly people and children). In that case, the age structure of the Han residents would be a normal pyramid much like that of the Tibetan population, not the present spindle shape with a gender imbalance.

Table 3.8 introduces the occupational breakdown of the Han and Tibetans in the TAR according to census data. These occupations clearly show their roles and functions in the local administration and economy. In 2000 the majority of Tibetans were engaged in agriculture and animal husbandry (86.6 percent) and the majority of Han laborers were industrial workers (21.5 percent compared with 36.9 percent in 1990). In 1982 "professionals" made up the second largest group by occupation (25.4 percent), and 18.8 percent in 1990, but this fell to 15.2 percent in 2000, when "trade and service labor" took the second spot with 21.5 percent. Factories in Tibet were established around 1956. At that time all textile-mill equipment was transported from Shanghai to Tibet. According to the 1982 census, of 82,572 industrial workers, 21,893 were Han (26.5 percent).

Only 3.4 percent of Han laborers worked in agriculture in 1990, mainly in state-owned farms. Because some Sichuan farmers rented land in the suburbs of Lhasa and other towns to grow vegetables (Yeh, 2006), the Han involved in agriculture increased to 7.9 percent in 2000. The total number of Han migrants working on farms has been limited. Even in the Cultural Revolution there was no intent on the part of the central government to organize Han Chinese to settle in agricultural and pastoral areas (Goldstein, 1997).[6] According to field research carried out by Western scholars there were few Han in rural TAR. "All 5,590 individuals in the 13 villages were ethnic Tibetans. There were no Han or Hui (Muslim) Chinese living there, either as residents or as temporary workers (Goldstein, et. al. 2006: 195)."

In 1975 a family-planning program was introduced among Han employees in the TAR. By 1980 the rule for all Han employees was: "One child was encouraged, two children were controlled and three children were forbidden." In 1987 one-child

Table 3.8. Occupational Structures of Han and Tibetan Laborers in the TAR

Occupation	**1982 Census**				**1990 Census**			
	Tibetan		**Han**		**Tibetan**		**Han**	
	Labor	%	Labor	%	Labor	%	Labor	%
Professional	28041	2.9	13945	25.4	60024	5.8	11155	18.8
Cadre	13611	1.4	4986	9.1	15506	1.5	4975	8.4
Office staff	9246	1.0	7081	12.9	11567	1.1	9830	16.6
Trade labor	4166	0.4	1291	2.4	12696	1.2	4629	7.8
Service labor	8406	0.9	4170	7.6	11038	1.1	4828	8.1
Agricultural labor	833714	87.1	1276	2.3	868644	83.5	1987	3.4
Industrial worker	59926	6.3	21893	39.9	60402	5.8	21880	36.9
Others	211	0.0	197	0.4	0	0.0	0	0.0
Total	957321	100.0	54839	100.0	1039877	100.0	59285	100.0

Occupation	**2000 Census***				**The Whole Nation of China**		
	Tibetan		**Han**		**1982**	**1990**	**2000**
	Labor	%	Labor	%	%	%	%
Professional	5325	4.3	1451	15.2	5.1	5.3	5.7
Cadre	1233	1.0	583	6.1	1.6	1.8	1.7
Office staff	2130	1.7	942	9.9	1.3	1.7	3.1
Trade labor	3769	3.1	3697	38.8	1.8	3.0	9.2
Service labor					2.2	2.4	
Agricultural labor	106474	86.6	758	7.9	72.0	70.6	64.5
Industrial worker	3930	3.2	2046	21.5	16.0	15.2	15.8
Others	148	0.1	54	0.6	0.0	0.0	0.0
Total	123009	100.0	9531	100.0	100.0	100.0	100.0

* 2000 census only covered 10 percent of the total population for occupation information.
Sources: Census Data; SBT, 2002: 508–511; SBC, 2002: 821–824.

families made up 87.5 percent of the total number of Han employees in Tibet; two-children families 12.3 percent and three-children families 0.3 percent (Tanzen and Zhang Xiangming, 1991b: 495–496).

Government-Arranged Migration under "Assistance to the TAR Programs"

Since the 1950s to now, the central government has arranged for a total of about 100,000 cadres, professional personals and workers to move to the TAR to work in

the administration and government institutions (including hospitals, schools, etc.) under the "Assistance to the TAR Programs." The process of this type of movement can be divided into three periods.

During the first period (1951–1978), cadres and professionals were sent to the TAR by government orders. Around 1957, there were 2100 to 2200 cadres and workers in the TAR. The central government arranged for more than 3,000 cadres to move to the TAR in 1959, and in the same year had 5,900 de-commissioned soldiers join working teams in villages in the TAR (Qiao Yuanzhong, 2002: 94). In 1978 there were 24,023 cadres from other provinces, about 13,000 of whom had worked in the TAR for longer than 10 years; some had worked longer than 27 years. In 1952 and 1953, 173 doctors were sent to the TAR from Shanghai and Beijing. From 1973 to 1981, four groups of doctors (totalling 1,500) were sent to the TAR from 12 provinces. From 1966 to 1976, about 3,800 professionals (doctors, teachers, technicians) were sent to the TAR to work there (Jin Wei, 2008: 193, 196).

The arrangement in the second period (1979–1993) took the form of "circulation." In August 22, 1979, the central government selected 3,092 cadres (mainly Han) from 19 provinces and 49 ministries of the central government and sent them to work in the TAR. Most of them were withdrawn in 1980 with a change of policy. In 1988, 414 cadres and professionals were sent to the TAR (Party History Material Collection Committee of the TAR, 1995: 222, 340) and their terms of service were: cadres, five years and professionals, three years. A further two groups of cadres and professionals were sent to the TAR in 1992 (Jin Wei, 2008: 194).

In the third period (1994-present) a program was more carefully designed. It can be summarized as "parallel assistance" between regions in the TAR and other provinces: Beijing and Jiangsu — Lhasa; Shanghai, Shandong, Jilin and Heilongjiang — Shigatse; Hunan, Hubei and Anhui — Lhoka; Guangdong, and Fujian — Nying chi; Tianjin and Chongqing — Nagchu; Hebei and Shaanxi — Ngari. These provinces are "responsible for a certain region, provide construction projects with financial aids, sending cadres and professionals to work in the region in circulation." Those cadres are still under the management of the provincial government during their service terms in the TAR. From 1995 to 2005, a total of 2,890 cadres from 18 provinces, 60 ministries and 17 state-owned key enterprises were sent to the TAR under the above program (Jin Wei, 2008: 195).

Since 1983 the central government has had a policy that aims to attract university graduates in other provinces to work in the TAR. After signing a contract that obliges them to work for eight years in the TAR, their salary temporarily rises to that paid for positions one rank higher in other provinces. After eight years of service in the TAR, the rank becomes permanent and they may return to their place of origin if they wish.

In general, the Han who have moved to the TAR since 1975 were sent by the central government for a certain period of time. The government arranged

for them to work in administration, transportation, post offices, power stations, hospitals, schools, universities, science and technology institutes, etc. They did not reduce the land resources available to native Tibetan farmers. For example, about 3,000 employees were sent to the TAR from central government ministries and 10 provinces, "most of them aged 30 to 40, half from the fields of light industry, sciences and technology, education, health care, communication, transportation, broadcasting and TV, agricultural machinery, etc (Banister, 1987: 307)." Total financial subsidies from the central government to the TAR were 21.96 billion yuan for the period 1952 to 1994.

Factors Affecting Han In-migration into the Tibetan Areas

Major differentials in social and economic systems between the TIA and the Han regions decreased in the 1960s, and disappeared in the 1970s, ancillary to the establishment of the commune system in the TAR. The period of 1959 to 1970 saw the main process of "system expansion" from the core area of China into the TIA. These changes in the TAR increased the possibility of Han in-migration, especially in urban areas where the traditional culture did not remain as strong as in the rural areas. Government control of in-migration to the TAR was temporarily loosened during the Cultural Revolution. In 1976 the central government called on university graduates, demobilized soldiers and educated youth to work in the TAR as volunteers, but the response was low.

So why did Han in-migration not take place in Tibet to the extent that it did in other autonomous regions such as Xinjiang and Inner Mongolia? In the Xinjiang Uygur Autonomous Region the Han population increased from 0.3 million in 1949 to 5.7 million in 1990 and in Inner Mongolia from 5.2 million in 1949 to 17.3 million in 1990. Although a certain proportion of the growth of the Han population in these two regions was due to a natural increase (about one-third in Inner Mongolia), in-migration was the main reason for such substantial growth. Among the various social, economic and cultural factors, what variables have had a strong negative impact on Han migration into Tibet? Government limits prevented in-migration of Han farmers, but what about young and well-educated Han who might be needed in the TAR?

I raised this question with both Han and Tibetan cadres and scholars during my survey in the TAR. I asked why the Han did not want to migrate to Tibet and why many of those who already work there want to leave. It seems there are different migration patterns in urban and rural areas in the TAR. For urban areas, the reasons given by cadres and scholars are summarized below.

1. The importance of geographic factors was confirmed by all Han respondents. Concern for their own and their children's health made many Han hesitant to

work in Tibet. Its high elevation and the scarcity of oxygen made many Han physically ill. I was told that after several cases in which either a mother or baby died in childbirth, Han women became reluctant to give birth in the TAR. They returned to home regions for childbirth and many left their babies there with relatives. According to research conducted by health-care institutions, in 1978 about 30 percent of Han cadres had pulmonary emphysema and 15.6 percent had pulmonary artery protrusion, and after working in the TAR for 10 to15 years, 54.2 percent of Han cadres had hypertension and heart disease. In 1978, 1,035 of these Han cadres were receiving treatment in other provinces and could not return to work in the TAR (Jin Wei, 2008: 193).

After a long period of working on the plateau, some Han believed they could not survive heart attacks or other diseases they might suffer upon their return to lower altitudes for retirement.

2. Because transportation in the TAR remained less developed, traveling to and from their homes was difficult. In addition, entertainment was limited. So for young Han cadres and intellectuals the inability to visit their families and lack of social activities made life in the TAR onerous and dull. The new railway connecting Lhasa and other provinces through Qinghai brought some changes in this regard.
3. Since the educational levels and development of science and technology were generally lower in the TAR than in other parts of China, young Han teachers, doctors and engineers complained that a stint in the TAR would hinder their professional careers. They felt they would be left far behind after several years of service in the TAR. The higher salary and other "bonuses" offered by the central government are incentives to persuade them to work in the TAR for a period of time.
4. Because of the poor quality of schools in the TAR, Han employees with children were worried about their educational progress. A common reason Han cadres gave for wishing to leave the TAR was that education was a priority and they did not want to bring their children to school in the TAR or leave their children with relatives in their place of origin. From 1995, the (*Neidi*) Tibetan schools in the Han regions started to recruit children of Han cadres who worked in the TAR for longer than 10 years. These children made up about 10 percent of students recruited annually from the TAR (Jampa Phuntso, 2005: 354). Because the (*Neidi*) Tibetan schools are good high schools, this policy became another incentive to encourage Han cadres to serve in the TAR.

Some Western critics of China's policies regarding Tibet have also pointed out that the Chinese usually do not volunteer to migrate to Tibet.

> Because of the high attitude of the Tibet Plateau, those who cannot adjust themselves will have allergic reactions, become sick and dizzy; pregnant women easily miscarry, it is also very dangerous for people with weak hearts to live in Tibet, some would never get used to it. All those factors have limited the number of Han in-migration to Tibet. (Dreyer, 1981)

Wang Lixiong also believed the shortage of oxygen on the Tibetan plateau was a serious obstacle for Han to live in the TAR (Wang Lixiong, 1998: 272–275). In general, plateau reaction is the major deterrent for people in other regions who are considering working in Tibet.

Every year, institutions of the central or provincial governments were asked to send a specified number of their staff (with the required professional skills) to work in the TAR for a designated period.[7] The government raised the salaries of these employees one or two ranks, allowed them to keep their official household registrations in their place of origin, and provided additional subsidies, better housing for their families at home and other benefits. For example, they may enjoy an all-expenses-paid six-month vacation after the first year of service. During these vacations it was not uncommon for cadres to try to postpone returning to their jobs in the TAR. The cadres in Tibet, including Han and Tibetans, usually lived in separate residential zones with better housing and electrical supplies than enjoyed by local Tibetan residents.

There are few Han engaged in agriculture in Tibet. In comparison, a large proportion of Han migrants in Inner Mongolia and Xinjiang were spontaneous rural-rural migrants. These migrations mainly took place during the 1950s and 1960s (Ma, 1987). During the Cultural Revolution, many Han peasants moved from poor Han areas into frontier areas with more land resources and lower population densities.

We can surmise that geographic factors and the scarcity of arable land precluded this kind of in-migration into the TAR even during the Cultural Revolution, when administrative controls on migration were loose. From 1952 to 2006, the area of cultivated land increased from 0.4 to 0.573 million acres in the TAR, but because of natural population growth, cultivated land per capita decreased from 0.35 to 0.21 acres. In 1988 only 34.8 percent of cultivated land (less than 0.2 million acre) was irrigated (Li Qingzhu, 1990: 55). Because of temperature, rainfall, irrigation and fertility of the land, grain production (181 kg per *mu* or 1.1 ton per acre in 1988) in the TAR was less than half that of nearby Sichuan. An investigation by the Chinese Academy of Sciences reported that arable land that can be cultivated in the future is only about 0.2 million *mu* (about 32,940 acres) in the TAR (Shang, 1989: 5). Cultivated land in the TAR (both by quality and quantity) did not provide opportunities for in-migrant farmers. Besides, the grain (barley) adapted to a plateau climate is different from grains in the Han regions (wheat and rice) and this might have a negative impact on farmers' in-migration. In recent years some skilled Han

farmers have rented small plots of land in the suburbs of Lhasa to build greenhouses for vegetables to be sold in the local market. Their goal is the same as that of other temporary residents — build a financial nest egg in a short period of time. Their numbers are limited and they do not intend to stay in Tibet permanently. There is a sharp comparison between the temporary migrants who moved to Lhasa and those who moved to big cities in coastal regions. The majority (56.7 percent) of spontaneous migrants to Lhasa plan to stay for less than three years (Ma Rong and Tanzen Lhundup, 2006: 150) and the majority of the migrants to coastal regions wish to become permanent residents. A survey conducted in Guangdong reports that 60.8 percent of respondents (among temporary migrants) wish to receive residential registration at their work site (Research Group of the State Council, 2006: 452).

In order to protect the environment in the upper reaches of two major rivers in China (the Yellow and Yangtze rivers), the central government of China organized a series of out-migration of Tibetan nomads in southeastern Qinghai Province. They resettled in nearby rural areas with subsidies and houses provided by the government. Because they had no land available for either herding animals or agricultural production, they relied largely on government subsidies and this became a social problem.

Several Tibetan autonomous prefectures are situated between the TAR and Han areas (Qinghai, Sichuan, and Gansu). The elevation in these prefectures is lower than that of the TAR and the climate is similar to the nearby Han regions. From 1953 to 1982, the Han population in these Tibetan autonomous prefectures increased from 0.43 million to 1.45 million, then decreased to 1.44 million in 1990. The migration from Han regions into the Tibetan areas was restricted by the central government and local authorities before and during the Cultural Revolution.

The recent economic reforms have allowed people to manage private businesses and travel with far fewer restrictions. Since the late 1980s spontaneous and temporary in-migration has taken place in urban areas of the TAR. Many peddlers, craftsmen, carpenters, construction workers and businessmen have arrived in Lhasa and other cities. The number of private shops, restaurants, repair shops, hotels, etc. established by Han increased quickly in the cities of the TAR. These migrants include Han, Hui, Tibetans, and others. In the summer of 1988, they numbered 45,000 to 50,000 in Lhasa, or about 30 to 40 percent of permanent residents in the city (Ma Rong, 1990a: 62); this number increased to 100,000 to 200,000 in 2005 by season. Since they were mainly young adults (predominantly male) and active in the markets, on the street they made a very strong impression on visitors to Lhasa. The government raised the salary of government employees in the TAR to 2.5 times that for the same rank in other regions. That significantly raised urban consumption and created new opportunities for trades and services. As a consequence, the income of temporary migrants in services also increased and became very attractive to newcomers.

When asked how long they intended to stay in the TAR, most migrants responded that they were there only for a particular season or a limited period. Among the 516 temporary Han migrants in our 2005 Lhasa survey, 39.3 percent reported that they planned to stay in Lhasa for less than two years, and only 16 of Han respondents said they intended to stay longer than 10 years (Ma Rong and Tanzen lhundup, 2006: 150). Most of them were there to earn money and they planned to go home when they had saved enough to re-build their houses or to open businesses. Those migrants who rented land to grow vegetables were welcomed by local residents because their products reduced the prices of vegetables in the local market.

The flow of temporary migrants into Tibet in recent years has strongly influenced local labor markets and raised prices, causing serious social tension owing to the competition facing local Tibetan craftsmen, businessmen and, especially, migrant laborers. During our interviews in Lhasa in 1988 and 2005, we heard many complaints from local Tibetan residents and temporary migrants about the competition in job markets owing to large numbers of Han migrants.

In Tibet, government policies and regulations are still key to understanding migration issues in both urban and rural areas, whether it's a case of government-arranged migration or spontaneous and temporary migration.

Conclusion

Several points follow from the above discussion:

The Han population in the Tibetan-inhabited areas has experienced notable changes since 1949. During the first period (1949–1982), the Han population increased from 0.426 million to 1.541 million. The number of registered Han residents has decreased since 1982. Most Han migrants made the move as a result of government-arranged employment. This is clear by looking at the age and occupational structure of the Han population in the TAR for the period. Many of them will leave at the end of their contracts.

The bulk of the Han population in the TIA is distributed in the counties of Sichuan and Qinghai that are near Han regions. Few Han farmers moved into the TAR. Since the 1980s the main stream of Han farmer migration aimed for coastal zones and large metropolitan areas, with small numbers heading to the West as temporary and seasonal migrants.

In 1990 the percentage of Han was lower than five percent of the total in half of all the counties in the Tibetan-inhabited areas. The Han population consisted of three to four percent of the TAR's population. Compared with other minority autonomous areas, notably Xinjiang and Inner Mongolia, the absolute number, relative size, and growth rates for the Han have been extremely low in the TIA.

Among the factors affecting Han in-migration, government policies used to be the most influential. But the situation started to change in the 1990s; since all citizens in China are free to travel it is hard for the government to restrict temporary migrants to the TIA. Which means the high elevation, job opportunities, income level, health care conditions, education, and transportation play important roles in migration. Those factors make Han immigrants choose to leave or stay, by making TAR a place more or less attractive to spontaneous migrants.

New migratory trends have appeared recently among Han in Tibetan areas, following the development of reform, prosperity in the coastal areas and the freedom to travel. While some well-educated Han, after acquiring work experience, have moved out of the Tibetan areas to seek better opportunities along the coast, other Han, from rural areas, have gone to cities in Tibet as temporary migrants to make money as in other cities throughout China. These temporary migrants stimulated economic development in Tibet but also caused social problems and ethnic tensions.

In general, although the Han population in the Tibetan-inhabited areas has increased to a certain extent, it still comprises a small proportion of the local population, especially in the TAR. The Han in-migrants, especially those whose migration was arranged by the government, are professional laborers who have contributed to social and economic development in the Tibetan-inhabited areas.

4

Analysis of the Population Structure in the Tibetan Autonomous Region

The Tibetan Autonomous Region (TAR) is unique among regions in the TIA when it comes to population analysis because of the availability of accurate data. Similar data for other Tibetan-inhabited areas are not recorded separately from province-wide data, or are provided only for administrative units, making analysis for these regions difficult.

The TAR is situated in southwestern China and covers an area of 1.2 million square kilometers. Recent studies, including *China's Population: Tibet Volume* (Liu Rui, 1988), *Changes in Tibetan Population* (Zhang Tianlu, 1989), *Tibetan Population in Contemporary China* (Sun Jingxin, ed. 1992) and *Tibetan Population and Society in China* (Sun Huaiyang and Cheng Xianmin, eds., 1999) provide useful insights to understanding historic changes in the Tibetan population. This chapter will first analyze the basic structural characteristics of the population of the TAR and then will analyze the changes in both the Tibetan and Han populations based on the 1982, 1990 and 2000 censuses.

The first part of this chapter will summarize briefly the basic characteristics of the population in the TAR. The second part will focus on the structural analysis of that population by comparing the Han and Tibetan sub-groups. The third part will discuss three of the four major fields of demography: fertility, mortality and urbanization. Another field — migration — will be the focus of Chapter 5. All populations are influenced by their adaptation within a given environment — the ecosystem and the distribution of natural resources — and affected by the social and economic conditions of the locality. Part four will discuss the factors influencing the development of the population with regard to the natural ecological environment and socioeconomic conditions.

The Major Characteristics of the Population in the TAR

The TAR is situated on the Tibetan Plateau ("the roof of the world") with an average altitude of 4,000 meters above sea level, surrounded by high snow mountains on all sides. The poor quality of the soil, the very limited rainfall, lack of oxygen and difficult transportation are among the factors that have led to its isolation and harsh conditions for development. These geographic and environmental factors have resulted in the three most basic population characteristics: ethnic homogeneity, low density in most areas and a low level of socioeconomic development.

Homogeneity is the first important population characteristic. According to the 2000 census, the total ethnic Tibetan population of China was 5.42 million, ranking 10th by size among the 56 ethnic groups. About 44.8 percent of the Tibetans lived in the TAR. Compared with the four other autonomous regions, the TAR had the highest minority population by percentage (Table 4.1), comprising 92.8 percent of its total.

Table 4.1. Ethnic Structure of Populations in Autonomous Regions (2000)

Autonomous regions	Population of ethnic minorities (%)	Population of major minority group (%)	Population density (person / km^2)	Urban population (%)
The TAR*	93.9	Tibetan 92.8	2.0	19.4
Xinjiang	59.4	Uygur 45.2	11.6	33.8
Guangxi	38.4	Zhuang 32.4	206.6	28.2
Ningxia	34.6	Hui 33.9	85.3	32.4
Inner Mongolia	20.8	Mongol 17.1	21.6	42.7
Whole China	8.5	Han 91.5	117.8	27.0

* The data of TAR include 108,682 temporary in-migrants from other provinces.
** The data of TRA is the percentage of "non-agricultural population in total."
Sources: the census data.

Low population density is the second characteristic of the TAR. With an area of 1.2 million square kilometers the TAR covers about one-eighth of China's total territory. But with a population of only 2.51 million in 2000 it had a population density of 2.0 per square kilometer, the lowest in China. A large area in northern Tibet, Changthang, which is mainly desert and ice plateau with an average altitude of 5,000 meters above sea level, is uninhabited. Tibetans live largely in valleys of the middle reaches of the Yalu Tsangpo River.

There are 18 counties in this valley area, which is also called the "district of one big river (Tsangpo) plus two small rivers (Lhasa River and Nianchu River)."

Compared with the TAR as a whole the altitude in this area is lower, the rainfall higher, and there are small plains allowing for cultivation. All important cities and towns in the TAR, such as Lhasa, Shigatse, Zetang and Gyantse, are situated in this area, which has been the political, religious, economic and cultural center of Tibet for centuries. However, these 18 counties only comprise one-fourth of all TAR counties even though the population is 34.8 percent of the total.

The low level of urbanization and relatively low level of socioeconomic development is the third characteristic of the TAR. Before the land reform in the late 1950s, Tibetans had for centuries being ruled by a political system combining religion and administration as well as an economic system under serfdom. With no modern industry prior to 1951, urbanization remained very low. The urban population consisted of about 19.4 percent of the total in 2000, much lower than the national level and lower than other autonomous regions.

Comparisons between the Han and Tibetan Populations in the TAR

According to the 2000 census, the total TAR population of 2,616,329 is made up of 92.8 percent Tibetan, 6.0 percent (158,570) Han, 0.4 percent (11,172) Monba and Lhoba groups and 0.7 percent (19,419) other groups. The Statistical Bureau of Tibet (SBT) provided another figure based on residential registration. By the end of 2000, there were 2,598,300 residents in the TAR, of whom 2,512,341 had an official registration in the TAR (SBT, 2003: 29). Regardless of the differences between the above data sets, the relative sizes among the populations of the ethnic groups are clear. Tibetans are the overwhelming majority of the population.

In the following sections, the geographic distribution, age and gender structures, educational structure, and industrial and occupational differences between the Han and Tibetan population will be discussed. As a reference, comparisons will be made with the relevant structure of the national population.

Geographic distribution

Administratively, the TAR has seven prefectures under its management: Lhasa (at prefecture level), Shigatse, Nakchu, Lhoka, Chamdo, Nying tri, and Ngari (Table 4.2). The Han population (the census also covered unregistered temporary migrants) was more concentrated in Lhasa and Nying tri prefecture while the Han percentages were lower than 5 percent in the other prefectures.

Table 4.2. The Seven Prefectures in the TAR (2000 Census)

Prefecture	Counties under its administration	Population	% of total TAR population	% of Han in local population	GDP in 2006 (in 10,000 *yuan*)
Lhasa	8	474,499	18.1	17.0	1,023,859
Chamdo	11	586,152	22.4	3.4	374,386
Lhoka	12	318,106	12.2	3.4	286,698
Shigatse	18	634,962	24.3	2.0	505,065
Nakchu	10	366,710	14.0	2.0	326,505
Ngari	7	77,253	2.9	4.6	113,290
Nying tri	7	158,647	6.1	15.0	275,097
TAR total	73	2,616,329	100.0	6.1	2,904,900

Source: SBT: 2007: 25; COT, 2002a: 34–39.

Table 4.3 introduces the Han percentages in urban districts of Lhasa and Shigatse, as well as five other key counties where the prefectural governments are based. It is clear that the Han population was unevenly distributed among the prefectures and counties. First, half of the total Han population lives in the Lhasa Urban District (at the county level in administration). The government administration of both the TAR and Lhasa City (previously Lhasa Prefecture) is concentrated in urban Lhasa. The degree of concentration of these administration bureaus is closely related to the number of government employees, of which the Han comprise a large proportion.

Table 4.3. Geographic Distribution of Han and Tibetan Population in the TAR (1990 and 2000 Censuses)

Area	1990 census				2000 census			
	Tibetan		Han		Tibetan		Han	
	Number	%	Number	%	Number	%	Number	%
Lhasa Urban District	96,431	4.6	40,387	50.0	140,387	5.8	76,581	48.3
Chamdo County	72,381	3.5	4,743	5.9	82,424	3.4	11,509	7.3
Nedong County	41,450	2.0	3,567	4.4	50,698	2.1	7,624	4.8
Shigatse City	76,246	3.6	2,951	3.6	90,986	3.7	7,652	4.8
Nakchu County	59,211	2.8	2,113	2.6	75,340	3.1	5,580	3.5
Gar County	8,206	0.4	1,159	1.4	10,705	0.4	2,357	1.5
Nying tri County	20,997	1.0	8,297	10.3	23,350	1.0	14,216	9.0
(Subtotal above)	(374,922)	(17.9)	(63,217)	(78.2)	(473,890)	(19.5)	(125,519)	(79.2)
Other 65 counties	1,721,796	82.1	17,620	21.8	1,953,278	80.5	33,051	20.8
Total	2,096,718	100.0	80,837	100.0	2,427,168	100.0	158,570	100.0

Source: COT, 1992a: 38–43; 2002: 34–39.

Excluding Lhasa Urban District, if we added together the Han populations of the six other counties (capitals of pefectures) in Table 4.3, then divide by six, each county would have 4.7 percent (or 3,805 persons) of the total Han population in 1990 and 5.1 percent (or 8,156 persons) in 2000 on average. Among the remaining 65 counties, each had a total of only about 0.34 percent (or 271 Han residents) on average in 1990, and about 0.32 percent (or 508 Han residents) in 2000, 14 to 16 times less than prefectural capitals. So it is obvious that because they are placed according to their rank in the administrative system, the Han in the TAR mainly live in the capitals of the TAR and prefectures. There were almost no Han in villages and pastoral areas.

The Han population almost doubled in Lhasa and six towns from 1990 to 2000. This was mainly because of the economic opportunities attracting in-migrants from other regions. The central government began many development projects (e.g. infrastructure construction, irrigation) in the TAR that required skilled labor. These projects and development of tourism attracted temporary in-migrants to work in services near the project sites and cities.

Age and gender

Age structure can reflect the rate of fertility and gender ratio at birth as well as changes caused by deaths and migration, i.e. the results of three factors (fertility, mortality and migration), working together. Under normal conditions, a population is self-regulating in terms of births and deaths each year. If there were a normal and stable social and economic development in a region with a stable pattern of geographic mobility, the rate of in- and out-migrations would also reflect regular patterns. In examining the age structure of a population and its gender ratio, irregular phenomena, would bring issues to our attention.

Figure 4.1 and Figure 4.2 show the age and gender structures of the Tibetan and Han populations in 2000. The figures provide a detail size of each age group. The basic shapes of the population pyramids of Tibetans and Han in 2000 are similar to the pyramids in 1990 (c.f. Figure 2.4). Several points can be summarized:

1. The gender balance and age structure of the Tibetan population shows a normal population "pyramid." Males and females are in balance through each age group. The size of age groups continually decreases due to mortality.
2. The 15–19 age group of the Tibetan population is noticeably larger than the 20–24 group. The 1980–1984 period was the beginning of China's system reform. After communes were dismantled nation-wide from 1982 to 1983 private business developed. The central government decided in 1980 to "eliminate taxes and 'below-market' quota sales" in rural areas in the TAR (Goldstein, 1997: 66). Various favorable policies were introduced into the TAR in health

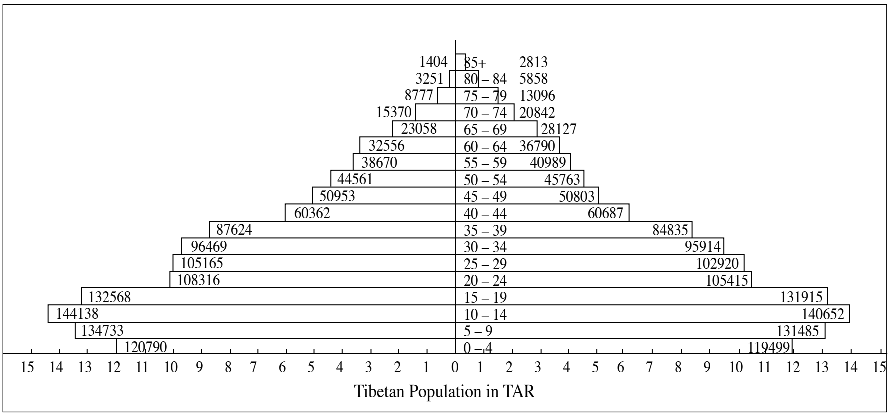


Figure 4.1. The Age Structure of Tibetan Population in TAR (2000)

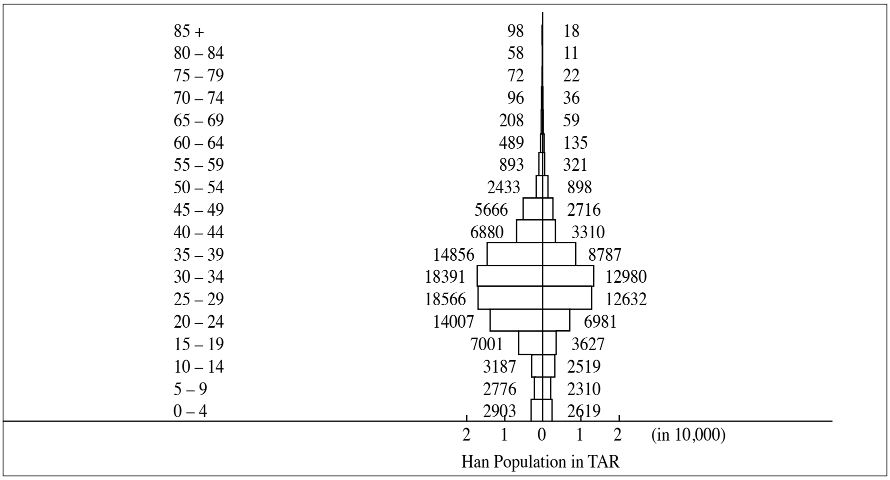


Figure 4.2. The Age Structure of Han Population in TAR (2000)

care and education. These policies boosted Tibetan fertility and resulted in a large 15–19 age group born from 1980 to 1985. The 1985–1990 period was marked with a continual fertility increase, resulting in the 10–14 age group becoming the largest. After 1990, family-planning programs were established to encourage urban Tibetans to limit themselves to only two children, which resulted in a continual decline in fertility.

3. The 35–39 age group of Tibetans was obviously larger than the 40–44 group. That means that the TAR birth rate from 1959 to 1964 was higher than that from 1955 to 1959 and the previous period. This population bubble may be attributed to political changes. After land reform in 1959 and 1960, the income and living conditions of the majority Tibetan population improved significantly. Serfs and slaves, who formerly found it economically difficult to have families, now received land, animals and houses, the resources for them to get married and start families. These changes may have led to a baby boom. Therefore, the increased size of the 35–39 age group may reflect fundamental changes in Tibetan society from 1959 to 1964.
4. The Han population in the TAR seems to be comprised overwhelmingly of government employees and some temporary migrants. The largest groups are in the 25–29 and 30–34 age groups, with the number of males conspicuously higher than that of females. This pattern confirms that young employees sent by the central government to work in the TAR for a certain period of time made up the majority of the Han population covered by the census. Because the majority only stayed for several years in the TAR they tended to leave their families at home. "Circulation" is a distinct migration pattern. The majority of temporary migrants shared similar age patterns with Han cadres and many had left their families at home.

Industrial structure

The industrial structures of Han and Tibetan laborers in the TAR are introduced in Table 4.4. The industrial categories in Chinese censuses are classified into 18 designations. In order to simplify the analysis, here they are combined into 12 categories plus "others." Based on this table, the industrial structures between Han and Tibetans in the TAR can be compared with that of China as a whole. Such comparisons can also be made among three censuses to determine changes across time periods.

Table 4.4. Industrial Structure of Han and Tibetan Laborers in the TAR

Industrial category	**TAR 1982 Census**				**TAR 1990 Census**			
	Tibetan		Han		Tibetan		Han	
	Labor	%	Labor	%	Labor	%	Labor	%
Agriculture	852973	89.1	2158	3.9	874250	84.1	1977	3.3
Manufacture	18574	1.9	8464	15.5	32230	3.1	8187	13.8
Geological prospect	1207	0.1	1974	3.6	1315	0.1	1205	2.0
Construction	11075	1.2	4462	8.1	7097	0.7	10774	18.2
Transp./Communication	15085	1.6	11895	21.7	15927	1.5	4851	8.2
Trade/restaurant	9679	1.0	3944	7.2	18756	1.8	7669	12.9
Public services**	1039	0.1	677	1.2	3997	0.4	2681	4.5
Health/sport/welfare	6651	0.7	2050	3.7	8934	0.9	1401	2.4
Culture/education/Arts	13457	1.4	5453	9.9	42952	4.1	4247	7.2
Research/technical Service	1089	0.1	1128	2.1	998	0.1	731	1.2
Finance/insurance	2023	0.2	715	1.3	2590	0.2	836	1.4
Party/adminis./mass groups	24283	2.5	11496	21.0	30826	3.0	14271	24.8
Others	186	0.0	423	0.8	5	0.0	5	0.0
Total	957321	100.0	54839	100.0	1039877	100.0	59285	100.0

Industrial category	**TAR 2000 Census***				**The Whole Nation of China**		
	Tibetan		Han		1982	1990	2000
	Labor	%	Labor	%	%	%	%
Agriculture	1054560	85.7	8080	8.5	73.7	72.2	64.4
Manufacture	37140	3.0	12400	13.0	13.7	13.4	14.1
Geological prospect	1290	0.1	1000	1.0	0.2	0.1	0.1
Construction	5980	0.5	7610	8.0	2.1	1.8	2.8
Transp./Communication	12970	1.1	5050	5.3	1.7	1.8	2.6
Trade/restaurant	25300	2.1	29100	30.5	3.0	4.0	6.7
Public services**	8190	0.7	7550	7.9	0.5	1.0	2.4
Health/sport/welfare	8970	0.7	2060	2.2	0.8	0.8	1.1
Culture/education/Arts	24650	2.0	4530	4.8	2.5	2.3	2.5
Research/technical Service	1260	0.1	590	0.6	0.2	0.2	0.2
Finance/insurance	3930	0.3	1610	1.7	0.2	0.3	0.6
Party/adminis./mass groups	42770	3.5	14130	14.8	1.5	2.0	2.3
Others	3080	0.2	1600	1.7	0.0	0.0	0.2
Total	1230090	100.0	95310	100.0	100.0	100.0	100.0

* The 2000 census covered only 10 percent of the total population for industrial information. The numbers in this table are the original number times 10.

** Public services: including hotel, rental service, public and residential services, tourism, entertainment, information service, computer service and other services.

Sources: The 1982, 1990 and 2000 Census Data. COT, 2002: 502–507. SBC, 2002: 815–820.

1. In 1982 Tibetan laborers who engaged in agriculture comprised 89.1 percent of the total, higher than the national level (73.7 percent); while Tibetans who engaged in manufacturing consisted of only 1.9 percent, much lower than the national level (13.7 percent). These two categories of laborers represent the largest gaps among the industrial category groups. Except for agriculture and work for the Communist Party/government administration, the percentages of Tibetans in other categories were lower than the national average. In short, Tibetans are still mainly farmers and fewer, in comparison to the Han, participated in secondary and tertiary industries. Because of the large areas with low population densities, administrators were relatively numerous (2.5 percent) compared with the national level (1.5 percent).
2. From 1982 to 1990 and 1990 to 2000, the structure of industry underwent some changes. The percentage of Tibetans engaged in agriculture fell by five percent, then increased 1.6 percent due to high fertility in rural areas. The number of Tibetans engaged in education/culture/arts tripled from 1982 to 1990. The emphasis by the government on Tibetan language in school led to about 29,000 Tibetans joining schools and universities as teachers. But from 1990 to 2000, the number of Tibetans in culture/education/arts fell significantly, as it did with the Han. The main reason was a change in the school system that saw substandard schools closing and unqualified teachers dismissed. From 1982 to 2000 Tibetans in public service increased 7.9 times compared with 2.6 times in the trade and restaurant business, twice in manufacturing and 1.76 times in party/administration. In contrast, the numbers of Tibetans engaged in construction, research and technical services declined in both absolute terms and percentages. In general, government policies in the TAR led to a significant increase of Tibetans in manufacturing, education and services, which developed quickly during the reform-system period.
3. The total Han population in the TAR in 1982 was 80,837 and the Han labor force was 59,285 (73.3 percent of the total Han population). At the same time, the Tibetan labor force was 49.6 percent of the total. By comparison, the Han population in the TAR was more like a working group than a residential population. From Table 4.4 we can see that in 1982 Han laborers were mainly concentrated in three categories: transportation/communication (21.7 percent), party/administration (21.0 percent) and manufacturing (15.5 percent).
4. From 1982 to 2000, the percentages of Han engaged in education/culture fell from 9.9 percent to 4.8 percent, remained the same in construction (8.0 percent), and increased from 7.2 percent to 30.5 percent in trade/restaurants, which became the largest industrial group of Han laborers. It is noteworthy that, during the same period, Tibetans engaged in these job categories also greatly increased at comparable rates. The percentages in these categories were not only much higher than those for Tibetans, but much higher than the national levels as well.

5. In contrast, the Han population engaged in agriculture was small (3.9 percent in 1982 and 8.5 percent in 2000), and they worked mainly on state-owned farms and forest farms. The number of temporary vegetable farmers in the suburbs grew during the 1990s. It is clear that these Han laborers played a role in maintaining the administration, transportation, communication, manufacturing, construction, education, health care and other services while a small percentage of them engaged in agricultural and forestry activities.
6. From 1982 to 2000, Han laborers decreased in number in four industrial categories: transportation/communication (from 11,895 to 5,050), geological prospecting (from 1,974 to 1,000), education/culture (from 5,453 to 4,530), research/technical services (from 1,128 to 590), while Han in health care/welfare maintained a similar size. These categories, and even the state farms where most Han agricultural workers were employed, were managed mainly by the government under the old planned economy. The government provided financial bailouts and covered their deficits. It is not surprising to see these industries declining. In general, we can speculate that these fields under the state-owned system did not really shrivel since the increase of Tibetans and decrease of Hans coincided. Tibetans working in party/administration increased from 24,283 in 1982 to 30,826 in 1990, then to 42,770 in 2000. Tibetans made up 74.1 percent of the total number of employees in this category in 2000.

Occupational structure

The occupational categories differ from the industrial categories. The occupations in Chinese censuses have been classified into seven categories plus a residual "others" category. To understand the social and economic characteristics of the TAR in greater depth, the discussion of occupational structure will be connected to industrial structures.

It is notable that the number of laborers among both Tibetans and Han increased in the industrial category of "party/administration." From 1982 to 2000, Han increased 2,634 while Tibetans increased 18,487 (Table 4.4). By occupational category Han cadres increased by 844 while Han office staff increased 2,339. Therefore, the increase of Han in party/administration was not due to more cadres/leaders but to office clerks.

As discussed in Chapter 3, the Han population in the TAR fell from 99,873 in 1981 to 91,720 in 1982 and then further to 79,650 in 1983 because of policy adjustment. Because there were very few temporary Han migrants at that time, this reduction reflected the withdrawal of Han cadres and workers from the TAR in the 1980s.

The number of Tibetan cadres increased by 1,895 from 1982 to 1990 and decreased by 3,176 from 1990 to 2000. Tibetan office staff increased 2,321 from 1982 to 1990, then increased 9,733 from 1990 to 2000. The promotion of Tibetan cadres from 1982 to 1990 was impressive and the reason Tibetan cadres decreased significantly from 1990 to 2000 is unknown. Because the 2000 census provides occupation information only for 10 percent of the total population, the numbers in Tables 4.4 and 4.5 for the 2000 data are 10 times the original data so there might be some sampling bias. If the 2000 census took a convenient approach to sampling respondents in Lhasa and other towns, it was very likely the percentage of Han in the TAR government, Lhasa government and prefectural governments and relevant institutions in cities would be higher than that of Han working at county-level administrations. Such sampling would result in a decrease of Tibetan cadres. Since the statistical yearbooks do not provide occupation data, the census data are the only sources for age, educational, industrial and occupational structures. In 2000 the percentages of two categories (cadre, industrial worker) for both Tibetans and Han decreased while the percentages of trade-service labor and farmers increased significantly. The changes might indicate the adjustment in economic structure in the TAR. Because the populations of other groups apart from Han and Tibetans in the TAR are relatively small — totally 22,650, or 0.83 percent of the total population in the TAR in 2007 (SBT, 2008: 33) — the discussions in this study focus on comparisons between Han and Tibetans in the TAR.

Tibetan professionals comprised only 2.9 percent of the total labor force in 1982, much lower than the national level (5.1 percent). This percentage increased to 5.8 percent in 1990, even higher than the national level (5.3 percent), an increase of 31,983 professionals since 1982. This is very surprising considering there were no corresponding numbers of university graduates to explain the availability of people moving into professional roles. During the same period, university and college graduates in the TAR numbered about 3,000 and graduates of technical schools numbered about 4,000 (SBT, 1993: 389). Even with Tibetan graduates from universities and schools outside the TAR, the total is lower than 31,983. The only possible explanation is that a certain number of less qualified Tibetan laborers entered the professional category from 1982 to 1990. Then we found a decrease of 6,774 in Tibetan professional in 2000. Some adjustment might be necessary.

The percentages of Tibetans as trade and service workers were only 0.4 percent and 0.9 percent in 1982, much lower than the national level (1.8 percent and 2.2 percent). The number of Tibetan trade workers (sales personnel) increased from 4,166 to 12,696 (three times) from 1990 to 2000, exceeding the national growth speed (1.7 times). This suggests a rapid growth in trade in the TAR. In contrast, the number of Tibetan service workers increased only 30 percent but that was still faster than the national average (nine percent) during the period. In the 2000 census, the two categories of trade worker and service worker were combined into one.

Table 4.5. Occupational Structure of Han and Tibetan Laborers in the TAR

Occupation	1982 Census				1990 Census			
	Tibetan		Han		Tibetan		Han	
	Labor	%	Labor	%	Labor	%	Labor	%
Professional	28,041	2.9	13,945	25.4	60,024	5.8	11,155	18.8
Cadre	13,611	1.4	4,986	9.1	15,506	1.5	4,975	8.4
Office staff	9,246	1.0	7,081	12.9	11,567	1.1	9,830	16.6
Trade	4,166	0.4	1,291	2.4	12,696	1.2	4,629	7.8
Service	8,406	0.9	4,170	7.6	11,038	1.1	4,828	8.1
Agriculture	833,714	87.1	1,276	2.3	868,644	83.5	1,987	3.4
Industrial worker	59,926	6.3	21,893	39.9	60,402	5.8	21,880	36.9
Others	211	0.0	197	0.4	0	0.0	0	0.0
Total	957321	100.0	54839	100.0	1039877	100.0	59285	100.0

Occupation	2000 Census*				The whole nation of China		
	Tibetan		Han		1982	1990	2000
	Labor	%	Labor	%	%	%	%
Professional	53,250	4.3	14,510	15.2	5.1	5.3	5.7
Cadre	12,330	1.0	5,830	6.1	1.6	1.8	1.7
Office staff	21,300	1.7	9,420	9.9	1.3	1.7	3.1
Trade	37,690	3.1	36,970	38.8	1.8	3.0	9.2
Service					2.2	2.4	
Agriculture	1,064,740	86.6	7,580	7.9	72.0	70.6	64.5
Industrial worker	39,300	3.2	20,460	21.5	16.0	15.2	15.8
Others	1,480	0.1	540	0.6	0.0	0.0	0.0
Total	1,230,090	100.0	95,310	100.0	100.0	100.0	100.0

* 2000 census only covered 10 percent of the total population for occupation information, the numbers in this table are the original number times 10.

Sources: Census Data; SBT, 2002: 508–511; SBC, 2002: 821–824.

Tibetan farmers and herdsmen comprised 87.1 percent of the total population in 1982. This number is lower than the percentage of laborers engaged in agriculture as an industry (89.1 percent). That indicates there were another two percent engaged in agriculture not as ordinary laborers but as cadres or technicians. The percentage of agricultural laborers decreased to 83.5 percent, indicating a trend of labor transfer from agriculture to trade and services during the period. But the number increased to 1,064,740 in 2000, which means a new generation of 196,096 joined a farmer group while only 13,956 joined the trade and service worker group. It reflects that there were obstacles for rural Tibetans with an education lower than college or vocational schools to enter the urban service job market, which will be discussed in Chapter 5.

The most significant changes in the occupational structure of Han laborers were the growth of trade and service workers from 10 percent to 38.8 percent (or an increase of 31,509) and the decrease of professionals from 25.4 percent to 15.2 percent from 1982 to 2000. The size of Han office staff increased from 12.9 to 16.6

percent (or increased 2,749) from 1982 to 1990, then remained the same from 1990 to 2000 while its percentage decreased. The large number of Han temporary migrants who entered the TAR in the 1990s changed the structure of the Han labor force and made labor transfer among different industries and occupations very complicated. One possibility might be that people transferred between two occupations in the same location or between different areas within the TAR.[1] For example, if a truck driver transferred from a transportation team in Shigatse (where he was registered in the industrial category of transportation) to a government bureau in Shigatse or Lhasa, he would be re-registered in administration. A technician registered as professional in the occupation category would be re-registered as service laborer if he quit his job and started to run a hotel or restaurant.

One noteworthy change was the increase of Han laborers as agricultural workers (from 2.3 percent to 7.9 percent or an increase of 6,304 laborers) from 1982 to 2000. Because all cultivated lands in the TAR were re-distributed among local Tibetan farmers in the early 1980s, Han laborers could not receive land and work as ordinary farmers. Some Han migrants rented land from Tibetan farmers in suburbs to build greenhouses for vegetable production, which led to Han farmers being hired to work there.

Educational structure

To measure educational levels in the TAR, we can on one hand examine the percentage of those who received higher education, and on the other look at the basic educational achievement of the TAR population. "Structure of educational achievement" refers to the percentage of the population who attended school above a certain age (the standards might be age six, 12 or 15 respectively).

In Tibet, as in the rest of China, children today begin with primary school, move on to junior middle school, followed by ordinary high school or vocational school. High schools prepare students for university entrance examinations and vocational schools prepare students to enter the workforce directly.

In 1982 the illiterate category was 78.1 percent of the total Tibetan population above the age of six, while it was only 6.8 percent among the Han in the TAR above the age of six. The national percentage of illiterate people was 31.9 percent. These data together reflect the generally low level of education among Tibetans and that the Han in the TAR were a relatively educated group.

In 1982, among all Tibetans with educational achievement, only 0.9 percent entered college or university, 2.9 percent were high school graduates, 11.7 percent were junior middle school graduates, and 84.5 percent completed primary school. These percentages were much lower than the nation as a whole. Illiterates and semi-literates in the TAR made up two-thirds of those above age of six while only 3.4 percent received education above high school.

Table 4.6. Educational Structure of Tibetan and Han Populations in the TAR

Educational achievement ****	Tibetan in the TAR						Han in the TAR					
	1982		1990		2000		1982		1990		2000	
	Num.	%	Num.	%	Num.	%	Num.	%	Num.	%	Num.	%
University ***	2806	0.9	7062	1.2	17421	1.9	5021	6.5	6551	7.9	15575	10.6
Vocational school	-	-	20656	3.5	37845	4.1	-	-	6923	8.3	11869	8.1
High school	9441	2.9	10312	1.7	19077	2.1	13172	17.1	15401	18.6	22534	15.3
Junior middle school	38406	11.7	64151	10.9	101441	10.9	29093	37.7	33702	40.6	61270	41.7
Primary school	276699	84.5	487932	82.7	751651	81.0	29902	38.7	20429	24.6	35741	24.3
Total above	327352	100.0	590113	100.0	927435	100.0	77188	100.0	83006	100.0	146989	100.0
Illiterate above 6	1170626	78.1	1180964	66.7-	1203605**	56.5	5667	6.8	-		4924	3.2
Total pop above 6	1497978	100.0	1771077	100.0-	2131040	100.0	82855	100.0	76439		151913	100.0
Illiterate above 15	-	-	969792*	72.8			-	-	2180	3.1		
Total pop above 15	1110720	-	1332132	100.0			65981	-	70620	100.0		
Educational achievement * **	**Whole nation of China (in 1,000)**											
	1982		1990		2000							
	Num.	%	Num.	%	Num.	%						
University **	6037	1.0	15757	2.0	44020	4.2						
Vocational school	-	-	17284	2.2	39209	3.7						
High school	66529	11.0	72604	9.2	99075	9.5						
Junior middle school	178197	29.4	263385	33.4	422386	40.4						
Primary school	355347	58.6	420205	53.2	441613	42.2						
Total above	606110	100.0	789235	100.0	1046303	100.0						
Illiterate above 6	283677	31.9	203855	20.6	110397	9.5						
Total pop above 6	889787	100.0	994090	100.0	1156700	100.0						
Illiterate above 15	-	-	181609	22.2	86992	9.1						
Total pop above 15	669088	-	817509	100.0	958085	100.0						

* This is for all ethnic minorities.
** Including 145,547 persons who attended "literacy class".
*** Includes 4-year and 2-year students and graduates.
**** All education levels include graduates, in school students, and those who left without certificates.
Sources: SBT, 2002: 164–171; SBC, 2002: 593–601; 633.

From 1982 to 1990 some improvements in education could be observed. Illiterates and semi-literates accounted for 72.8 percent of the population above age 15 in 1990, while the national level was 22.2 percent. During this eight-year period, the Tibetan population above 15 increased 19.9 percent (221,412) while the Tibetans receiving education increased 80 percent (262,761). Tibetans who received college/ university education increased 2.5 times. Although the situation improved further from 1990 to 2000 by percentage, illiterates increased 22,641 in absolute number, and that means some children did not attend school in remote pastoral areas.

In 1990 there were 20,656 Tibetans who had previously graduated or were studying in vocational school. This indicates a noteworthy adjustment in the

educational structure of the TAR. During the same year, the ratio of vocational-school students to high-school students was 1: 4.2 nationwide while the ratio was 2: 1 in the TAR and it remained the same in 2000. It seems that the TAR placed more emphasis on vocational-school education and this policy certainly would have had some impact on the development of the TAR.

The number of graduates and students attending primary school increased from 276,699 in 1982 to 487,932 in 1990, then to 751,651 in 2000. The students attending junior middle school increased from 38,406 in 1982 to 64,151 in 1990, then to 101,441 in 2000. The size of the two educational groups increased 2.7 and 2.6 times respectively during an 18-year period.

The change in age structure of Han has some impact on their educational structure. From 1982 to 1990 Han above the age of six declined by 6,411 while the number of people above 15 increased by 4,639. In other words, the Han population between ages six and 14 fell by 11,050, about 13.7 percent of the total Han population in 1990. The Han age group of zero to five also declined by about 4,000 from 1982 to 1990. The Han population below the working age (16) decreased a great deal (about 20 percent of the 1990 total Han population), while the working population (above 15) continually increased. The age structure of Han in Tibet thus became even more skewed by national standards.

In 1982 the Han population above the age of six in the TAR advanced educationally by national standards: 6.8 percent illiteracy, 6.5 percent graduated from college, 17.1 graduated from high school and 37.7 percent graduated from junior middle school. In 2000 the educational background of the Han population in the TAR advanced even more: 10.2 percent had a university degree and illiterates accounted for only 3.2 percent. Combining the age, educational, industrial and occupational make-ups, it is clear that the Han population in the TAR was a working group rather than a residential population.

In conclusion, I note that although the education of Tibetans is still behind the national level, it is improving with time. The rapid growth of vocational education is one positive characteristic of the TAR's educational system compared with other provinces in China where from the 1990s many vocational schools became colleges or even joined universities. Moreover, because the majority of the officially registered Han population in the TAR were there on government-arranged "term" migration as "working groups," their educational levels cannot be compared with any normal population.

Major Changes in the Population of the TAR since 1949

The population dynamics in the TAR will be discussed in four major fields of demography: fertility, mortality, migration and urbanization.

Compared with other statistical data, there have always been problems with the accuracy of fertility and mortality data in the TAR and even for China as a whole. Many rural residents do not report births and deaths to public security stations in a timely manner owing to inconvenient transportation or because they do not think it important to do so. That is why there are often differences between fertility data from various sources at different times in the TAR, as there are mortality rates. For example, the birth rate was 24.35 per 1,000 according to 1981 annual statistical records, but the 1982 census reported a birth rate of 31.05 per 1,000 for 1981. The difference is as large as six per 1,000. The data in Table 4.7 came from the TAR's Statistical Bureau, which provides data each year, although census data are only provided for the year before the census was taken. Table 4.7 provides the rates estimated by the census data and annual sampling surveys. These estimates are always higher than local statistical records. For example, the difference was 5.2 per 1,000 in 2002. Under-recording by the TAR Statistical Bureau might be attributed to low population density, poor transportation and communication, or inadequately trained personnel or procedures for checking data. But because the data provided by the Statistical Bureau of the TAR are the only systematic and longitudinal data available, it will have to serve as the main data source.

Fertility

In order to discuss the combined impact of fertility and mortality on the natural increase of population in the TAR, Table 4.7 provides birth and death rates as well as natural increases with a comparison to the national rates. The changes in birth rates of the TAR population (including all ethnic groups) since 1959 can be divided into six periods.

Although data for the period before 1965 are not available, Figure 4.1 indicates that the 35–39 age group (born between 1959 and 1965) is much larger than the 29–34 group (born between 1954 and 1959). Therefore we can assume a high fertility rate for the period 1959–1965.

The second period (1965–1969) with low birth rates (fewer than 20 per 1,000, much lower than the national fertility rate) resulted in a low natural increase rate (fewer than 10 per 1000). This was the period that followed the establishment of the TAR in 1965 when its newly founded Statistical Bureau started to build its system and branches throughout the TAR to collect population data (Liu Rui, 1988: 81–82). Therefore, people expected that the data this new bureau collected might be lower than the actual numbers. This period was also the compensatory "baby boom" period in other parts of China after the serious 1959–1962 famine. There were no government restrictions on births during this period.

Table 4.7. Birth, Death and Natural Increase Rates of the TAR and China

Year	The TAR						China		
	Birth rate		Death rate		Natural Increase Rate		Birth rate	Death rate	NIR
1965		14.35		5.10		9.25	37.88	9.50	28.38
1966		14.74		6.14		8.60	35.05	8.83	26.22
1967		19.80		11.56		8.24	33.96	8.43	25.53
1968		15.58		7.86		7.72	35.59	8.21	27.38
1969		16.78		6.80		9.98	34.11	8.03	26.08
1970		25.26		10.16		15.10	33.43	7.60	25.83
1971		25.12		9.85		15.27	30.65	7.32	23.33
1972		25.04		9.34		15.70	29.77	7.61	22.16
1973		25.39		9.56		15.83	27.93	7.04	20.89
1974		24.68		9.24		15.44	24.82	7.34	17.48
1975		24.34		9.13		15.21	23.01	7.32	15.69
1976		23.48		9.25		14.23	19.91	7.25	12.66
1977		24.37		9.14		15.23	18.93	6.87	12.06
1978		22.86		8.75		14.11	18.25	6.25	12.00
1979		22.41		8.24		14.17	17.82	6.21	11.61
1980		21.36		8.21		13.15	18.21	6.34	11.87
1981		24.35		8.75		15.60	20.91	6.36	14.55
1982		24.47		7.66		16.81	22.28	6.60	15.68
1983		27.02		8.64		18.38	20.19	6.90	13.29
1984		23.96		8.00		15.96	19.90	6.82	13.08
1985		23.32		10.12		13.20	21.04	6.78	14.26
1986		24.54		8.41		16.13	22.43	6.86	15.57
1987		24.19		7.95		16.24	23.33	6.72	16.61
1988		22.69		7.65		15.04	22.37	6.64	15.73
1989		24.17		7.95		16.22	21.58	6.54	15.04
1990	(26.0)*	22.63	(8.9)	7.42	(17.1)	15.21	21.06	6.67	14.39
1991	(24.5)	23.53	(8.4)	7.40	(16.1)	16.13	19.68	6.70	12.98
1992	(23.6)	22.64	(8.1)	7.65	(15.5)	14.99	18.24	6.64	11.60
1993	(23.8)	21.32	(7.6)	7.34	(16.2)	13.98	18.09	6.64	11.45
1994	(24.9)	19.53	(8.7)	7.78	(16.2)	11.75	17.70	6.49	11.21
1995	(24.9)	20.6	(8.8)	7.6	(16.1)	13.0	17.12	6.57	10.55
1996	(24.7)	19.2	(8.5)	7.0	(16.2)	12.2	16.98	6.56	10.42
1997	(23.9)	18.4	(7.9)	7.5	(16.0)	10.9	16.57	6.51	10.06
1998	(23.7)	16.2	(7.8)	6.9	(15.9)	9.2	15.64	6.50	9.14
1999	(23.2)	14.5	(7.4)	6.5	(15.8)	8.0	14.64	6.46	8.18
2000	(19.5)	17.6	(6.6)	6.6	(12.9)	11.0	14.03	6.45	7.58
2001	(18.6)	14.2	(6.5)	6.5	(12.1)	7.6	13.38	6.43	6.95
2002	(18.8)	13.6	(6.1)	6.1	(12.7)	7.5	12.86	6.41	6.45
2003	(17.4)	14.2	(6.3)	6.7	(11.1)	7.5	12.41	6.40	6.01
2004	(17.4)	14.1	(6.2)	6.6	(11.2)	7.5	12.29	6.42	5.87
2005	(17.9)	12.0	(7.2)	5.9	(10.8)	6.0	12.40	6.51	5.89
2006	(17.4)	10.0	(5.7)	4.5	(11.7)	5.5	12.09	6.81	5.28
2007	(16.4)	11.3	(5.1)	4.3	(11.3)	7.0	12.10	6.93	5.17
2008	(15.5)	13.8	(5.2)	4.4	(10.3)	9.3	12.14	7.06	5.08

* The numbers in brackets for the TAR are estimates based on the census and annual sampling surveys. Because complete records for births and deaths in remote areas cannot be obtained through household registration, these estimates may be closer to reality and are listed in this table as a reference.

Sources: Liu Rui, 1988: 81, 102; SBT, 1995: 59; 1999: 32; 2009: 30. SBC, 1995: 37; 1998: 106; 2009: 89.

The third period (1970–1975) saw relatively high birth rates (24–25 per 1,000), which resulted in a natural increase rate above 15 per 1,000. The birth rates across China (including the TAR) were between 23 and 33 per 1000 with a gradual decrease after the baby boom. Statistics gathering became more accurate in the TAR after training and practice (1965–1970), resulting these days in closer-to-reality birth rates recorded by government statistics.

The fourth period (1976–1991) indicates unstable birth rates. Birth rates fell to 21–22 per 1,000 from 1978 to 1980, increased from 1981 to 1983 and kept going up and down from 1984 to 1991. Since 1984 the TAR government has begun to enforce family-planning programs (encouraging couples to have two children, sometimes three) and birth rates in the TAR have been maintained at 22–23 per 1,000. At the national level, fertility also declined to about 20 per 1,000 after 1976.

The fifth period (1992–2007) witnessed a trend toward fertility decline. The numbers in brackets for the TAR are estimates based on the census and annual sampling surveys. The birth rates in 2005 and 2006 registered by household registration (10–12 per 1,000) were even lower than the national birth rates (12 per 1,000). Because residents in pastoral areas or mountain areas often do not report their births on time, the birth rates in brackets (16.4–17.9 per 1,000) are closer to fact. Generally, the decline in birth rates as a fertility trend can be confirmed.

Mortality

In general, the changes in death rates for the TAR can be divided into four periods. The first period (1965–1969) had unbelievably low death rates of five to seven per 1,000, except for 1967. The serious under-recording problem discussed concerning birth rates also compromises the analysis of mortality.

The second period (1970–1977) saw high death rates of above nine per 1,000. This period has been called the "normal period of statistical work in the TAR (Liu Rui, 1989: 101)," meaning the data were becoming more accurate. During the third period (1978–1986) death rates in the TAR started to decrease. Except for 1982, the annual death rates were around eight to nine per 1,000. There is no explanation for the high death rate in 1985 (10.1 per 1000). Because birth rates were not stable, the natural increase rates varied between 13 and 18 per 1,000 during this period. The fourth period (1987–2006) indicates a continual decline in death rates.

The death rate in 1981 was 8.8 per 1,000 according to SBT, while the death rate for the same year was reported at 9.92 per 1,000 by the 1982 census. The difference was 1.12 per 1,000. The death rate reported by SBT for 1989 was 7.95 per 1,000 and the rate reported by the 1990 census was 8.37 per 1,000. The difference in 1990 was 0.42 per 1,000. The 2000 census death rate (6.6 per 1,000) was the same as the annual statistical records. But after 2002, the difference between census estimates and registered death rates appeared again.

Because of their religious traditions Tibetans usually do not wish to discuss the deaths of family members. I had a very strong impression of this during my household interviews in Lhasa. When I insisted on asking a head of a household about the deaths within his family (how many died, when the specific child died, and what was the cause of his/her death, etc.), he hesitated to answer, and a female visitor told me that Tibetan people are reluctant to talk about deaths, especially of children who died young. She told me that Tibetans considered asking for detailed information about deaths rude and insulting. That might explain why complete death records could not be collected in the TAR, especially in remote pastoral areas. I believe even in remote areas in a western country, birth and death records might not be as accurate as people may wish them to be.

If the recorded total population is close to reality and reflects cross-regional (provincial) migration, the natural increase should be close to the actual level, while the under-reporting of births and deaths could offset each other to some extent. The sparse population spread over such a large area plus high mobility in pastoral areas made statistical gathering extremely difficult. As a result, there has been much under-reporting.[2] Because analyses of mortality by regional variation, sexual ratio and age groups, and reasons for deaths in the TAR have been published in detail (Liu Rui, 1988: 104–137), along with analyses of the 1990 census results on mortality in the TAR (Huang Rongqing and Sonam Panjor, 1992), these issues will not be discussed here.

The focus of this chapter is the structural comparison between the Tibetan and Han populations in the TAR using demographic indicators, but the systematic basic data were released by administrative zones and are not available by ethnic group. That makes our comparison difficult. In the censuses, birth and death data were reported by ethnicity. Those are the only available data by ethnic group. However, by relying on the population size by ethnic groups at the end of 1988 and at the end of 1989, the population size by ethnicity for the middle of 1989 can be calculated roughly. Then by connecting those statistics to the birth and death data collected by the 1990 census for 1989, the birth and death rates for Tibetans and Han can be calculated (Table 4.8).

Table 4.8. Comparison of Birth and Death Rates in the TAR

Ethnic group	Population	Births	Birth rate (per 1000)	Sex ratio at birth	Deaths	Death rate (per 1000)	Sex ratio of deaths
Tibetan (1989)	2,047,129*	67,604	33.02	103.2	17,764	8.68	111.5
Han (1989)	77,430*	784	10.12	113.6	115	1.49	379.2
Tibetan(2000)**	2,427,168*	-	-	-	17,933	7.39	106.8
Han (2000)**	158,570*	-	-	-	99	0.62	191.2

* The data are for June 30, 1989 and the end of 2000 respectively.

** The rest of the data are for the period November 1, 1999 to October 31, 2000.

Source: COT, 1992a: 444, 456; 2002: 200.

The birth rate of the Tibetan population in 1989 (33 per 1,000) in this calculation is much higher than the regional level provided by the SBT (24.17 per 1,000). It is also higher than official census estimates (26 per 1,000 in 1990). Because Tibetans comprised 95.5 percent of the total population in the TAR, the rates for the entire region should be very close to that of the Tibetan population. The difference of about nine per 1,000 is too large. The difference might reveal that the actual fertility rate has been much higher than recorded by the SBT. Based on this calculation, we may even guess that the actual Tibetan population is larger than reflected in official reports.

In contrast, the birth rate of the Han was 10.12 per 1,000, only one third that of Tibetans. Common sense would indicate that since the Han in the TAR were aggregated in the 20–34 age group their birth rates should be higher than those of Tibetans. There might be three reasons for this discrepancy. First, a large proportion of the Han working in the TAR were unmarried college/university graduates and even if they got married during their service period they usually intended to have their first and only birth after returning to their places of origin. Second, because males were the majority among Han in the TAR — and many men left their wives at home in the Han regions — the births would be recorded at the place of the mother's residence.[3] Third, most Han women prefer to deliver their children in Han regions because they are afraid the high altitude might harm mother and baby. Since these births took place in other regions, they might not have been recorded in TAR local statistics.

The death rate of Tibetans (8.68 per 1,000) in 1989 is higher than that in the statistical records of the TAR (7.95 per 1,000) (Table 4.7). We can assume that the census data are closer to reality than the statistical records. The 2000 census provides a lower death rate for Tibetans, which is probably indicative of changes in mortality of local Tibetans.

The death rate of the Han population were only 1.49 per 1,000 in 1989 and 0.62 per 1,000 in 2000. Given its age structure with very few elderly people and children, the death rate is, not surprisingly, low. Because tensions created by their work are usually stronger for young men who are more likely to work in fields such as truck driving, geological prospecting, construction, etc., they face greater risks. A study of the causes of death in the Lhasa Urban District showed that four percent of deaths from 1976 to 1984 were caused by high-altitude hypoxia (sickness in reaction to the altitude) (Liu Rui, 1989: 121). The Han comprised 36.8 percent of the total population of the Lhasa Urban District in 1982. If we assume no Tibetans died of high-altitude hypoxia, the percentage of Han who died of high-altitude hypoxia would be 10.9 percent of total deaths, a very high proportion.

The sex ratio of deaths among Han was 379 men vs. 100 women in 1989, and the ratio fell to 191.2 in 2000. Whether Han females' higher resistance to plateau disease was a reason for the high gender ratio in deaths in the TAR requires further research.

The life expectancy at birth in the TAR is well below the national level. From 1974 to 1976, life expectancy was 61.65 (59.75 for males and 63.12 for females). The national level was 63.74 for males and 65.39 for females from 1973 to 1975. For the period 1979–1984, life expectancy was 63.86 (61.88 for males and 65.53 for females) in the TAR; demonstrating a growth of two years in the life expectancy of Tibetans. One foreign study reported life expectancy at 39.1 for the Tibetan population in 1982, but the data sources are unknown (Poston and Shu, 1992: 586). The national life expectancy in 1981 was 67.88 (66.43 for males and 69.35 for females) (Liu Rui, 1988: 128). In 2000 in China the life expectancy was 63.98 for Tibetan males and 67.86 for Tibetan females, compared with 71.46 for Han males and 75.33 for Han females (Huang Rongqing, et al, 2004: 327). Tibetans' life expectancy is increasing, but it remains about seven years below the national level.

Urbanization

Tibetan society developed more slowly than did other areas of China before the 1950s. Transportation conditions were very poor and urbanization was also at a very low level. In 1982 the urban population comprised 9.5 percent of the total in the TAR, reaching 11.5 percent in 1990 and 19.4 percent in 2000, much lower than national levels: 20.55 percent in 1982, 26.2 percent in 1990 and 36.9 percent in 2000.[4] In general, there are three characteristics of urbanization in the TAR:

A transfer from the two-level urban system to the three-level system

Before 1959, there was a two-level urban system (Lhasa-Shigatse vs. other towns) in Tibet. Lhasa and Shigatse, as two parallel political, religious, economic centers in central Tibet (*U* and *Tsang*), were the locations of the two most important incarnate monks: the Dalai and Panchen lamas. Under the new administration of the TAR, Shigatse is ranked along with other capital towns at the prefecture level, while Lhasa has been given much more emphasis as the capital city of the TAR. Then a three-level urban system (Lhasa — prefectural capitals including Shigatse — other county towns) emerged and was strengthened. For example, in 1990 Nakchu Town (capital of Nakchu Prefecture) had about 16,000 non-agricultural urban residents, which was close to the population of Shigatse (23,000 non-agricultural residents).

In 2000 the percentages of total non-agricultural population in two cities and six counties as prefectural capitals were: Lhasa Urban District 60.7 percent, Shigatse City 30.4 percent, Chamdo County: 20.1 percent, Nedong County (Lhoka) 22.0 percent, Nakchu County 20.0 percent, Nying tri County 39.6 percent, and Gar County (Ngari) 40.4 percent (COT, 2002a: 29–33). The non-agricultural population of Lhasa Urban District was much larger there than elsewhere, and urban Shigatse was in the rank of other towns in the TAR.

In the TAR not all urban residents registered as non-agricultural population

It is generally assumed that residents living in urban areas should be engaged in non-agricultural activities, and people living in rural areas are farmers or herders. In the case of the TAR, the two categories are not very distinct. First, a large proportion of the urban population (50 percent by the first statistical standard mentioned above, 30.5 percent by the second standard) had registered as agricultural residents in 1990. Second, a large number of non-agricultural residents actually lived in villages.

Statistical registration in the TAR certainly had some problems. For example, there were five "Jianzhi Towns (administrative towns)" that had no single "non-agricultural resident" in 1990. This would be completely unimaginable in other parts of China. One possibility might be that some rural residents actually lived in towns while some non-agricultural workers lived in adjoining rural areas. But that would account for only a small number of people. Another possibility is there were mistakes in statistical reports and recording.

There were about 10,400 "non-agricultural residents" (37 percent of the total "non-agricultural residents") living in rural areas in 1990, and the number and percentage were 80,183 and 24 percent in 2000 (COT: 2002c: 1030–1031). The non-agricultural residents in rural areas tended to be employees engaged in work such as cadres at the *xiang* level, geological prospecting technicians, miners, forestry workers, highway maintenance workers, village school teachers, etc. According to the 1990 census, there were 2,700 people working in geological prospecting and 32,600 people in transportation, highway work, communication and postal services. Some of them were registered in urban areas. Even if they had all registered in rural areas, these two groups together only accounted for one-third of the total non-agricultural population in rural areas. As outlined above, many local cadres were not counted as non-agricultural residents. This issue needs further exploration in the study of urbanization in Tibet.

Large numbers of temporary and circular migrants have gone to the TAR in recent years

Since the mid-1980s, many people (mostly Han from nearby provinces) have gone to the TAR as temporary or term migrants. According to estimates of the Public Security Bureau of the TAR, there were about 60,000 temporary migrants in Lhasa urban areas in June 1985, more than 50 percent of the permanent residents of the city. In 2005 the estimate of temporary migrants in Lhasa was about 200,000 in summer and 100,000 in winter. The relative size of the number of temporary migrants in cities and towns in the TAR is much higher than for any cities in the Han regions.[5]

These temporary migrants included businessmen, craftsmen, construction teams and self-employed service people. Most of them were Han who went to Tibet

because there were many economic projects underway and numerous services were in demand. There has been a large influx of Han and Muslims (Hui) into Tibet since 1984. Hui is a group with a long tradition in trade and services in grassland Tibetan areas in Qinghai and Gansu. As Goldstein has documented, this was not a deliberate Chinese scheme to "swamp" Tibet with Han "colonists," as is often charged, but rather a result of the government's desire to develop Tibet quickly (Goldstein, 1997: 84). Given their large numbers, they had a strong impact on the job market, and consumption (prices and services). On one hand, Han migrants promoted the local economy and service facilities. On the other, they placed pressure on public services (housing, transportation, health care, food supply, etc.), and created serious competition in the labor market because many rural Tibetans also went to Lhasa to look for jobs.

During household interviews in the old urban district of Lhasa in 1988, many Tibetan residents (especially such self-employed craftsmen as carpenters, tailors, porters) complained that Han craftsmen took business away from them, and raised the prices of necessities (meat, butter, vegetables, etc.) in the market. More importantly, the appearance of a large number of Han doing business in Lhasa streets has changed the ethnic and cultural atmosphere of this Tibetan "holy city." It has given many Tibetans, both Lhasa residents and pilgrims, the feeling that their way of life has been disrupted. As Melvyn Goldstein observed, "They [Tibetans] wanted economic improvement but not at the expense of transforming the ethnic and demographic character of Lhasa and Tibet (1997: 85)."

The ability of Lhasa to endure the pressures of temporary laborers is not as strong as in other cities in China. The size of its permanent residents is relatively small, a large proportion of residents in the old urban district do not have secure jobs, the general skill level is low, and cultural differences (language, religion, life style) between them and these temporary Han migrants are great.

In conclusion, the TAR has a generally low level of urbanization. All cities and towns in the TAR have developed some modern infrastructure and facilities since the 1950s. Because of the lack of energy and raw materials for industrial production, and given the low level of skilled labor, however, it will not be easy to develop industrial cities. Meanwhile, to promote township/village and private enterprises, it will be necessary to improve the development of the basic infrastructure in small towns and to connect all cities and towns through effective transportation and communication.

Natural Resources, Economic Development, and Population Changes

The lack of oxygen and low rainfall allow only a few plants and animals to survive in Tibet. The valleys among snow mountains only provide limited arable land with

generally poor-quality soil. These conditions have limited the development of agriculture in the TAR. There were 0.223 million hectares (or 0.551 million acres) of cultivated land (only 980 hectares were paddy fields) in the TAR, or 0.09 hectares per capita in 2006. Because irrigated land made up only 35.9 percent of the total, grain production was about 2.18 ton per acre in 2006. Since grain production was 481.5 kg per acre in 1951 and 1,022.8 kg per acre in 1985 (SBT, 2007: 152–154), the improvement is obvious.

According to an investigation into natural resources conducted by the Chinese Academy of Sciences, there were only about 32,940 acres of uncultivated arable land in the TAR (Shang, 1982: 5); the difficulty of increasing arable land has also been observed by western scholars (Goldstein et al., 2006: 205).[6] Further rural development in the TAR cannot rely on the expansion of cultivated land. It will have to concentrate on technological development, investment and/or intensification of agriculture, animal husbandry and industry. While capital investment will be a key factor, it is also necessary to master the application of technology and management skills under Tibetan conditions. The future development of the TAR will rest heavily on two issues. First, the government should provide education and training programs to farmers with applied skills, such as greenhouse vegetable production or other high-price products, such as Tibetan medicines and "ecological farm products." Second, the government should control population growth by limiting temporary migrants into the TAR.

In recent years, caterpillar fungus, a very special plant that can only be found in Tibetan Plateau, became a significant income source of Tibetans in some areas because of its high price as a traditional medicine. But the sustainability of this unique resourse is still in question and it should be protected by the government and local communities.

It is true that TAR areas were self-sufficient in grain before the 1950s. The total gain production increased from 153,200 tons in 1951 to 923,688 tons in 2006 (5,884 ton rice, 265,315 tons wheat, 592,000 tons barley, and 60,489 tons beans and others, c.f. SBT, 2007: 155). But since the 1960s, grain imports from other Han regions have become important in the TAR. Three reasons might be behind the grain imports. First, the population of the TAR increased rapidly, from 1.27 million in 1953 to 2.81 million in 2006. Second, the diet of many people changed from barley to wheat and rice. I asked several Tibetan scholars working in Tibet Academy of Social Sciences about the diet change among Tibetans, and was told that today both rural and urban Tibetan usually eat barley (tsamba) for breakfast, rice for lunch and meals made of wheat flour for dinner. Children and the elderly eat more tsamba than do adults. Many "urban (and many rural) Tibetans actually prefer flour from Nepal or China to that made from Tibetan wheat (Goldstein et al., 2006: 206)." Third, people used a lot of barley to make beer. In a survey covering 780 rural households in the TAR, "76 percent of households said they now make beer regularly. On average, households

reported using approximately 416 kilograms of barley per year for making beer. That amount of grain is roughly equivalent to output of three *mu* (two hectares) of land, which, in turn, is roughly equivalent to the share of land one person received at the time of decollectivization (Goldstein et al., 2006: 201)." A certain amount of grain was imported to the TAR according to the records.[7]

Most areas of the TAR lack petroleum and coal resources. Water resources are huge but are very expensive to use. The hydroelectric station built on Yamdok Tso Lake at considerable cost can produce only 90,000 kw per year. Lhasa long relied on a thermal power plant run with oil for its electricity supply. We noticed during our interviews that some residents in Lhasa still cooked with kerosene. In recent years, solar power has become an important source. There are seven solar power plants that generate 10–100 kw per year in the TAR. Tibetan farmers and herdsmen have 150,000 solar furnaces and a 200,000 m^2 solar water-heating system. The total power production is close to 9 mw and supplies the needs of more than 500,000 residents (*People's Daily*, November 27, 2006). Although the development of solar power greatly improved to meet the daily power needs of residents for cooking, hot water, electrical lights and TV, the solar-power plants can provide only limited electricity supply to support urban infrastructure and industrial development.

Because of the scarcity of energy resources, the development of manufacturing has been very difficult. At a time when many "100 million yuan productive value villages" emerged in coastal areas of China, in 1985 the total industrial production value was only 21.2 million yuan for the whole of the TAR. Productive value does not necessarily mean economic benefit. Industrial production in the TAR has been in deficit for decades. One yuan investment in industry resulted in a 0.45 yuan deficit in 1985. The statistical item "enterprise incomes" was always in the red, with total deficits reaching 1.32 billion yuan during the period 1963–1988.

Starting in 1989, industrial production entered positive territory. But the fact that enterprise income is positive does not mean a lack of deficits. For example, the enterprise income in the TAR was 3.4 million yuan in 1992 and 9.98 million in 1994, but the "subsidy to cover planned deficits for enterprises" in the TAR government budget was 120.18 million yuan in 1992 and 164.87 million in 1994 (SBT, 1995: 106). In 2007 the subsidies revenue of the central government to the TAR reached 28,041.27 million yuan while the TAR local government revenue was 2,314.37 million yuan in the same year (SBT, 2008: 87).

Statistical records on imports and exports help us to understand resource and consumption patterns in the TAR. Goods transported out of the TAR were mainly chrome and timber. Timber was harvested in Nying chi Prefecture in eastern Tibet. Because forestry covered only 5.3 percent of the total area of the TAR, timber production has been severely limited in recent years.

The main goods transported into the TAR include grain, oil (fuel and energy), consumer goods (products of light industry), construction materials, equipment,

vehicles and other necessities of daily life. If these goods were calculated by weight, the total goods transported from the Han regions amounted to 165 kg per capita in 1990 in the TAR. The total value of goods imported from other parts of China was 701.75 million yuan in 1990. These goods, transported great distances at high cost, are essential to sustaining the TAR's urban society.

Before 2006, these goods were transported by train to the Golmud railway station in western Qinghai, then by truck to Lhasa before being redistributed in the TAR. The cost of transportation and damage during transit is extremely high. In order to maintain prices at a level Tibetans could afford, these goods were sold in the Lhasa market at prices similar to those in Han regions, in other words, at prices much lower than the real cost. The subsidies for these consumer goods were a significant part of the TAR government budget. In 1992 central-government subsidies totaled 644 yuan per capita in the TAR at a time when the "pure income" of the rural population throughout China was 630 yuan. Since 2006 the new Golmud-Lhasa railway has greatly improved transportation in the TAR, with benefits to tourism.

The central government has put into practice a number of policies favorable to Tibet. Since the early 1950s, the government has announced free health-care services throughout the TAR, but the services do not reach remote areas and the quality of service is low.[8] In 1988 the TAR government permitted rural hospitals to collect some charges for medical treatment. In 2008 both rural and urban residents in the TAR were covered by separate health security programs. Low-income household security programs are also in practice in the TAR and the details will be discussed in Chapter 7.

Improvements in medical services reduced mortality among Tibetans and increased life expectancy in the TAR and other Tibetan-inhabited areas. Since 1980 all agricultural/pastoral activities have been exempt from taxes (Goldstein, 1997: 64). The exemption from agricultural taxes and government investments in irrigation and other services promoted agricultural production and increased the income of farmers and herdsmen, which improved the economic capacity of Tibetan families and resulted in higher fertility. The financial subsidies provided by the central government helped to maintain supplies of food and other necessities, greatly improved local infrastructure, secured the relatively high income of urban residents and their daily needs and improved their health and living conditions.

5

Migration in the Tibetan Autonomous Region

Migration is a major research field in population studies. When people change their residence from one place to another, their movements may be aimed at crossing a certain geographic boundary (e.g. from a mountain to a plain), crossing an economic boundary (e.g. from an agricultural area to a pasture), crossing an administrative boundary (e.g. from one province or nation to another), or changing their residence from one type of community (city, village) to another. The mobility may be the result of many converging factors at both the places of origin and destination, and may result in important changes in their lives. Scholars are not only interested in simple changes in people's location, but in the social, economic and cultural consequences of their movements.

In general, information on migration in the TAR has been limited. The 1990 census only released information on respondents' registration status. The 2000 census provided information of their place of origin by province if the respondents were registered officially outside of the TAR. There have been limited in-depth surveys on migration undertaken in the TAR.

The 1988 survey, organized by the Institute of Sociology and Anthropology (ISA) and the China Tibetology Research Center (CTRC), provides basic information about migration in the late 1980s. The 2005 Lhasa Temporary Migration Survey conducted by the ISA is one of the most recent questionnaire surveys on migration in Tibet. After a brief review of the basic migration patterns in the TAR, this chapter focuses on an analyses of the data from these two surveys. The surveys were designed to cover different aspects of social, economic and demographic information as well as changes over time, and provide some insights into Tibetan society and its migration patterns.

Basic Migration Patterns in the TAR

In defining "migration" and "non-migration," the duration of the move and geographic scope should be clarified first. The basic migration patterns in the TAR can be discussed in three categories: international (crossing the national border), inter-provincial (crossing the boundary between the TAR and other parts of China) and migration within the TAR. Some refer only to cases in which the move is followed by official changes of residential registration while some temporary migrants might be covered by censuses and surveys.

The main groups of people in the TAR to cross national borders were local residents who engaged in border trade. The "circulation" of government employees from Han regions was the main component of inter-provincial migration in the TAR. Migration within the TAR has been connected largely to people who moved to Lhasa, Shigatse and other prefectural capitals to search for job opportunities, attend schools, get married or live with their relatives, among other reasons. The change of their official residential registration required permission from the public security bureaus at the destination whose task was to control the size of the urban population or border areas.

Temporary migration under the planned economy was restricted by administrative control. People who visited a relative or did business in another place before the middle of the 1980s needed an official certificate to stay in a hotel or with relatives for a permitted period of time. They also needed grain coupons to obtain grain at local state-owned grain stores or to have a meal at a restaurant. The provincial coupons were printed in each province. In the case of inter-provincial travel, the travel certificates would allow the travelers to change provincial grain coupons for national grain coupons, limited to the period in which they were permitted to travel. Food coupons (or a monthly grain allowance), which used to be a chief way to control migration, were abandoned officially in 1991. Travel certificates were abolished at the same time, leaving only the (citizen) identification card as the sole requirement for buying airplane tickets or staying in hotels. As Chinese citizens, people can now travel anywhere within the nation. Since the early 1990s, more and more urban jobs have been open to rural-urban migrants. This was a fundamental change in the Chinese social system, and greatly affected the migration patterns in rural and urban China.

The government now has no administrative measure to control the movement of people from one place to another, from rural to urban areas. Han and Tibetans from other provinces now travel freely to the TAR and Tibetans also travel to other parts of China. The number of Tibetans who traveled and lived outside the Tibetan autonomous areas reached 404,588 in 2000.

International migration

The national border spans 3,550 kilometers in the TAR. Most of the boundaries are along the Himalaya range and are difficult to traverse except at a few mountain passes. Yatung (at the border next to Sikkim, a protectorate of India since 1950) and Zham (at the border next to Nepal) used to be the two major traditional international trade ports in the TAR. In 1959 a group of Tibetans followed the Dalai Lama to India, Nepal and Sikkim. Their numbers can only be estimated: 60,000 (Richardson, 1962: 214); 50,000 to 55,000 (Grunfeld, 1987: 187) and 91,000 (Zhang Tianlu, 1989: 10).

Accompanying the economic development and "open door" policies of China in the 1980s, travelers between the TAR and south Asian countries have increased. Zham became the major trading port of the TAR but Yatung port remains closed to this day. Nevertheless, information and data on international migration from the TAR remains very limited.

According to the 1990 census, there were only 159 persons from the TAR who were registered as studying or working abroad; 78 percent of them traveled from Zham (COT, 1992: 8–10). The 2000 census shows that only 156 persons (91 males and 65 females) who originally registered in the TAR studied or worked abroad (COT, 2002a: 11). These numbers only covered those migrants with official permissions. On the other hand, according to customs' records, Chinese citizens (including Tibetans, Han and members of other groups) in the TAR who crossed the border to Nepal increased from 1,160 in 1973 to 29,269 in 1984, while foreign citizens who crossed the border to the TAR increased from 13,538 to 75,448 during the same period (Liu Rui, 1988: 156). Their numbers should be greatly higher in the 1990s and 2000s. The increase in total value of border trade in the TAR, which jumped from US$5.11 million in 1984 to US$248.92 million (76.3 percent of the TAR's total international trade) in 2007, makes it clear that many businessmen are traveling across the China-Nepal border. Most international migrants were businessmen who went to Nepal or India temporarily for trade; some went to visit relatives for a short time. Some settled abroad for business or other reasons and were not recorded in government documents.

Accompanying the open-door policy, some Tibetans in exile returned to the TAR and resettled. For example, according to local government statistics for Saga County, in October 1987, 89 households (214 persons) had returned to this county since the early 1980s (*The People's Daily*, Jan. 3, 1988, overseas version). There were also a number of Tibetans from the TAR and other Tibetans areas went to India or Nepal since the 1980s. According to the Tibetan authority-in-exile, their number reached 41,980 during 1980–2000.[1] In recent years, some Tibetan children have gone to India without official permission to attend schools in exile communities and their numbers vary in different reports. These types of illegal international migration is forbidden by the Chinese authorities and there are no official data available.

Inter-provincial migration

Before the 1980s, Han had made up the majority of inter-provincial migrants. A researcher summarized the pattern of inter-provincial migration in the TAR as "large fluctuation, large rural/urban differentials, with a Han majority (Liu Rui, 1988: 143)." Han who went to the TAR in the 1950s and 1960s did so mainly through government arrangement. Since the late 1970s, their time in the TAR has been referred to as a "service term," usually lasting three years. Among these employees in "Assisting Tibet" ("*yuan zang*") programs, a proportion has been ethnic Tibetans who were born in other Tibetans areas and who received higher education in Han regions, and then were sent to the TAR. Thousands of Tibetans were recruited by universities in Xining, Lanzhou, Chengdu, and Beijing; most of them returned to Tibetan areas, especially the TAR, after graduation.

It is safe to say that Han comprised a large proportion of inter-provincial migration, but this does not mean that the Han have been the majority of net-in-migrants. From 1965 to 1994, there was a net total of 98,500 in-migrants in the TAR while the net increase of Han numbered only 29,000 (Table 5.1). In other words, although every year many Han moved to and left the TAR, the "circulation" did not greatly increase the total size of the Han population. The majority (70 percent) of those, who settled as in-migrants, were Tibetans from other areas.

Many migrants in the TAR live in Lhasa: 65.6 percent of in-migrants and 53.4 percent of out-migrants in inter-provincial migration from 1980 to 1985 were from Lhasa alone. The large fluctuation in migration has been affected by an adjustment of government policies. For example, the Han population declined from 122,356 to 99,873 in 1980–1981. This was the result of policy change after Hu Yaobang's visit to the TAR (Tanzen and Zhang Xiangming, 1991a: 437–439).

According to the 2000 census, there were 213,777 persons in total who were interviewed by census staff but registered in other places. Among them, 108,682 (50.8 percent) were registered in other provinces: 68,509 from Sichuan, 10,268 from Gansu, and 4,909 from Qinghai (COT, 2002a: 415, 427). But the data were not broken down by ethnic status.

Inter-provincial migration in the TAR from 1965 to 2008 can be divided into three periods. Overall, in-migrants outnumbered out-migrants by 218,800 over the four decades: 1965–1980 was a period of net in-migration and 1981–1992 was a period of net out-migration. From 1993 to 2001 the balance shifted again to net in-migration, and the number has increased since 2003 (Table 5.1).

The area distribution of inter-provincial migration in the TAR from 1986 to 1994 is shown in Table 5.2. Although recent data are not available, some characteristics still can be observed by examining the data for this period.

Table 5.1. In- and Out-migration in the TAR (10,000 person)

Year	Net migration	Year	In-migration	Out-migration	Net migration	Year	Net migration*
1965	1.23	1979	4.37	3.09	1.28	1995	0.52
1966	1.36	1980	0.76	0.68	0.08	1996	0.85
1967	2.00	1981	0.23	3.28	-3.06	1997	0.82
1968	1.64	1982	0.18	2.09	-1.91	1998	0.50
1969	1.43	1983	0.64	0.97	-0.34	1999	0.34
1970	0.89	1984	.050	1.24	-0.74	2000	0.74
1971	1.84	1985	0.52	0.70	-0.18	2001	0.54
1972	1.43	1986	0.42	0.78	-0.37	2002	-0.16
1973	1.09	1987	1.14	0.62	0.53	2003	1.90
1974	0.66	1988	0.79	0.78	0.01	2004	2.26
1975	0.44	1989	0.68	1.21	-0.53	2005	2.52
1976	0.86	1990	0.49	1.34	-0.86	2006	-0.41
1977	0.57	1991	0.38	0.61	-0.23	2007	1.24
1978	0.72	1992	0.47	0.68	-0.21	2008	0.32
		1993	2.60	2.58	0.02	(1965-2008)	
		1994	2.24	2.04	0.20	Total	21.88

* Since the recent yearbooks do not provide in- and out-migration data, it is calculated by total population growth minus the natural increase for the year.

Sources: *Almanac of China's Population* (1985), p. 546; SBT, 1994: 69; 1995: 40; 1999: 31–32; 2009: 29–30.

Table 5.2. Inter-provincial In- and Out-migration in the TAR by Prefecture (1986–1994)

	1986	1987	1988	1989	1990	1991	1992	1993	1994
In-migration:									
Lhasa city	46.8	58.0	49.9	52.8	42.2	57.0	56.7	42.2	37.0
Nying chi	14.3	11.3	9.2	6.6	16.7	10.9	10.4	8.1	8.9
Chamdo	7.5	9.4	10.9	7.4	7.6	4.8	7.9	6.1	6.1
Lhoka	6.1	3.2	6.2	6.8	4.2	6.7	6.1	6.7	8.3
Shigatse	14.8	6.7	6.3	8.1	5.5	13.6	8.1	20.6	21.9
Nagchu	8.3	8.8	15.0	16.8	22.9	4.2	7.4	11.4	12.0
Ngarii	2.2	2.6	2.4	1.4	0.8	2.8	3.4	4.9	5.8
Total %	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total #	4156	11436	7916	6760	4860	3818	3818	22962	22488
Out-migration:									
Lhasa city	40.1	36.5	53.6	41.7	53.5	57.1	49.2	44.0	32.9
Nying chi	16.1	19.6	10.4	13.2	16.2	9.7	7.9	8.5	9.1
Chamdo	9.0	11.7	12.0	13.6	5.3	8.2	7.7	5.9	7.9
Lhoka	8.9	7.7	8.4	8.2	6.5	7.0	7.3	7.8	9.2
Shigatse	18.4	18.3	10.8	14.7	7.8	11.9	9.1	19.5	20.6
Nagchu	6.3	4.1	2.7	5.9	9.1	4.3	16.6	10.7	14.3
Ngarii	1.2	2.1	2.1	2.7	1.6	1.8	2.2	3.6	6.0
Total %	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total #	7821	6166	12064	12064	13425	6101	6784	25763	20440

Sources: SBT, 1991: 127; 1995: 40.

1. Lhasa City (as a prefecture in administration)[2] has played an important role in inter-provincial migration in the TAR. In- and out-migration from or into Lhasa accounted for more than 50 percent of total inter-provincial migration from 1980 to 1985. During that time in-migrants in the TAR comprised 65.6 percent of the total and out-migrants made up 63.4 percent of the total. Most out-migration from the TAR took place in 1981. That year, among 32,819 out-migrants from the TAR, 23,097 (70.4 percent) were from Lhasa. The data, which only covered permanent-residence changes, did not include temporary migrants or pilgrims.

   The records of migration refer to Lhasa City (including the Lhasa Urban District and seven adjoining counties), but these migrants were concentrated in the Lhasa Urban District. Both the TAR government and the Lhasa City government (at the prefecture level) are in Lhasa. Many supporting institutions have their headquarters in Lhasa. From 1986 to 1994 Lhasa City accounted for 37.0–58.9 percent of the TAR's total in-migration and 32.9–57.1 percent of the TAR total out-migration.
2. The regional variations are obvious. Nagchu had large numbers of in-migrants from 1988 to 1990 compared with other years, while Nying chi had large numbers of out-migrants from 1986 to 1990. Since the migration numbers were generally small, an adjustment in administration or a big economic project might have resulted in changes of migration patterns by region.
3. Both in-migration and out-migration have increased greatly since 1993. Compared with migration volumes in 1992, the number of in-migrants and out-migrants increased fourfold in 1993 but remained, generally, in balance. One possible explanation is that the periods during which workers served may have been shortened by new government regulations. The impact of policy is always key to understanding migration variations in the TAR.

Table 5.3 provides information about inter-provincial migrants in 2000. It is clear that about 108,682 people lived in the TAR but registered in other provinces. These registered migrants were government employees who went to work in the TAR for a period of time by government arrangement. They kept their formal residential registration in their place of origin during the service term. When their service term ended, they would have returned to where they officially registered. The majority of these migrants came from nearby provinces. But even a distant province such as Hainan also had some residents living in the TAR. This is a noteworthy phenomenon in the TAR.

Beginning in the early 1980s and following policy adjustment to allow more freedom of travel, temporary migration became widespread throughout China. The majority of the temporary in-migrants in the TAR were Han Chinese and about one-third were Tibetans from other regions, such as Sichuan and Qinghai. According to

Table 5.3. Inter-provincial Migrants in the TAR (2000): Distribution of Current Residence by Province of Official Registration

Place of registration	Residence in the TAR in 2000							
	Total	Lhasa	Chamdo	Lhoka	Shigatse	Nagchu	Ngari	Nying chi
Total	108682	51525	14430	6967	9914	6484	2697	16665
1. Sichuan	68509	32338	10057	4534	5814	2930	1412	11424
2. Gansu	10268	4584	959	588	1553	1333	326	925
3. Qinghai	4909	2695	358	172	272	622	289	501
4. Chongqing	4797	1863	597	320	219	231	125	1442
5. Henan	3391	1401	262	310	318	335	84	681
6. Shaanxi	2625	1355	209	153	393	156	84	275
7. Zhejiang	2406	1600	131	99	327	121	39	89
8. Hunan	2047	832	537	112	141	140	18	267
9. Hubei	1536	795	165	226	128	32	44	146
10. Yunnan	1453	325	602	41	80	231	8	166
11. Anhui	1154	646	94	118	42	76	8	170
12. Jiangsu	1042	767	57	23	66	41	16	72
13. Shandong	691	311	75	41	144	45	7	68
14. Fujian	595	346	4	77	44	13	4	107
15. Hebei	452	230	28	31	42	20	32	69
16. Guizhou	411	134	74	34	56	35	8	70
17. Shanxi	330	124	105	18	43	8	10	22
18. Beijing	292	258	6	6	11	4	1	6
19. Ningxia	290	219	12	15	11	9	1	23
20. Xinjiang	285	80	12	2	9	7	163	12
21. Jiangxi	272	112	17	15	68	29	2	29
22. Liaoning	222	124	2	18	16	40	5	17
23. Shanghai	177	79	7	1	74	2	4	10
24. Guangdong	132	54	19	3	15	0	0	41
25. Huilongjiang	98	63	3	3	5	7	5	12
26. Jilin	96	70	1	0	8	3	2	12
27. Inner Mongolia	90	65	3	2	5	12	0	3
28. Tianjin	43	11	25	2	4	0	0	1
29. Guangxi	42	27	5	3	4	0	0	3
30. Hainan	27	17	4	0	2	2	0	2

Source: COT, 2002a: 432.

registration records, there were 1,195 Hui people officially registered in the TAR in 1964. Their population increased to 1,529 in 1985, 2,132 in 2000 and 2,228 in 2007, then reduced to 2,158 in 2008 after the "March 14 event" (SBT, 2009: 33). The 2000 census covered 9,031 Hui people in the TAR. The 2000 registration data and census data show that during that year about 6,899 persons, or 76.4 percent of the total Hui population in the TAR, belonged to the category of temporary migrants.

Migration within the TAR

Survey data on migration within the TAR were limited. In our 1988 TAR survey, household heads were queried about their personal migration experience. Literature on migration in the TAR offered several suggestions. First, regional variation in local migration is smaller than that in inter-provincial migration. The migration volume between areas within the TAR is positively related to the level of socioeconomic development of the areas (Liu Rui, 1988: 145). Lhasa accounted for 63 to 65 percent of inter-provincial migration, but for only 49 percent and 37.9 percent of in- and out-migration within the TAR. Shigatse, the TAR's second-largest city, accounted for 5.5 percent and 10.6 percent of inter-provincial in- and out-migration and for 16.5 percent and 17.3 percent in- and out-migration within the TAR. The capitals of most prefectures had higher local migration rates than inter-provincial migration. This reflected the fact that the Han constitute a significant part of inter-provincial migration and Tibetans account for the majority of migration within the TAR.

Lhasa also plays an important role in local migration within the TAR. The migration rate (the percentage of migrants among total residents) was about 5.2 percent and 7.5 percent in 1986 and 1987 in Lhasa City (prefecture). The migration rate in Lhasa Urban District (county level) was even higher (13.9 percent and 15.7 percent in those two years). Nying chi was another prefecture that experienced a high migration rate at the time. The migration rate was 4.3 percent and 10.3 percent in Nying chi Prefecture and 11.8 percent and 21.8 percent in Nying chi County (the location of the prefectural government) (Li Li, 1989: 20). Because Nying chi Prefecture was founded in 1986, the migration volume in the ensuing years was related largely to government establishment.

The regional variations in migration within the TAR are shown in Table 5.4. From 1979 to 1985, of the total recorded migration within the TAR, Lhasa City accounted for 37.9 percent and 49 percent of in-migration and out-migration. But, in general, regional variation in migration within the TAR is smaller than that for inter-provincial migration.

Table 5.4. Regional Variations in Migration within the TAR (1979–1985)

Prefecture	Percentage in total migration within TAR (%)		Regional population
	In-migration	Out-migration	In total TAR population (%)
Lhasa City	37.9	49.0	20.0
Chamdo	19.8	18.5	25.9
Lhoka	6.3	5.0	13.7
Shigatse	17.3	16.5	24.8
Nying chi	11.5	9.1	13.0
Ngari	2.9	1.6	2.7
Total TAR	100.0*	100.0*	100.0

* The sum of percentages does not equal 100.0 in the original source.
Source: Liu Rui, 1988: 145.

The 1988 Socioeconomic Survey in the TAR

It was found that geographic mobility was higher in Lhasa than for rural residents. About 83.2 percent of rural respondents were born in the same village where they currently lived. In comparison, this was true only for 45.2 percent in Lhasa: 39 percent of respondents in Lhasa were born in other prefectures or in other provinces. Among the 1,312 households interviewed in 1988, 438 household heads (33.4 percent of the total) were not native born. They comprised 51.4 percent (331 household heads) in Lhasa and 16.0 percent (107 household heads) in rural counties.

Our questionnaire had 35 questions divided into three categories related directly to migration: the migration history of household heads — dates of move, places of origin and destination of each move, motives for migration, whether they had relatives or friends at their destination before moving, occupations before and after migration; information about travels — at least crossing county boundaries — outside their present residences, times and duration of travel, times and duration of travel for economic activities; and how much money they earned from these travels and the usage.

Places of origin and destination

Regional variation exists in migration within the TAR. The place of residential registration and the place of actual residence for some people were not the same in the 1990 and 2000 censuses (Table 5.5).

For the whole TAR, 2.8 percent of the residents covered by the 1990 census lived where they were not officially registered. Most of them (2.6 percent) had stayed at their current residences for more than one year. Among the seven prefectures, migrants were more concentrated in Lhasa (9.5 percent for Lhasa City and 19.4 percent for its Urban District). The second largest concentration was in Nying chi, a new prefecture established in February of 1986. Its capital town had about 30 factories, one of them — the wool mill — had more than 1,600 employees in 1984. The Tibetan College of Agriculture and Animal Husbandry was also situated there. The percentage of in-migrants in Nying chi even exceeded that of Shigatse, the second-largest city in the TAR.

Comparing the 1990 census data with those of the 2000 census, we can see that mobility in Lhasa urban areas increased significantly during the period, while the situation remained the same in other prefectures. Among the six other prefectures, residents without local registration accounted for less than seven percent in five prefectures although it reached 15 percent in Nying chi.

Another noteworthy phenomenon was that 10.7 percent of Lhasa residents covered by the 1990 census who had an agricultural registration were actually

Table 5.5. Difference between Place of Registration and Actual Residence in the TAR

1990 census	Total	Lhasa	(Lhasa Urban)	Chamdo	Lhoka	Shigatse	Nagchu	Ngari	Nying chi
Total population	2196029	375985	139822	500173	280811	549157	293842	61639	134422
Live & regi. in the county%	96.8	89.0	77.3	99.2	98.1	98.7	99.0	97.9	93.7
Live here longer than 1 year but regi. other county%	2.6	9.5	19.4	0.7	1.3	0.9	0.8	1.6	5.6
Live less than 1 year but left regi. place more than 1 year%	0.2	0.5	-	0.0	0.2	0.1	0.0	0.4	0.4
Live here & regi. unclear%	0.4	1.0	-	0.1	0.5	0.2	0.2	0.1	0.3
Total (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Live here with agri. regi.%	97.6	89.3	34.4	99.4	98.9	99.2	99.5	98.0	93.4
2000 census	**Total**	**Lhasa**	**(Lhasa Urban)**	**Chamdo**	**Lhoka**	**Shigatse**	**Nagchu**	**Ngari**	**Nying chi**
Total population	2616329	474499	223001	586152	318106	634962	366710	77253	158647
Live & regi. in the *xiang*-town%	91.3	75.3	51.2	95.1	94.2	96.8	96.0	93.4	85.3
Live here longer than 6 months but regi. other *xiang*%	7.6	22.4	44.5	3.8	4.0	2.9	3.4	5.7	13.4
Live less than 6 months but left regi. place more than 6 months%	0.6	1.5	2.9	0.8	0.2	0.1	0.3	0.6	0.7
Live here & regi. unclear%	0.5	0.8	1.3	0.4	1.5	0.1	0.2	0.3	0.6
Total (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Live here with agri. regi.%	87.2	68.7	39.3	94.0	91.5	90.8	92.3	88.0	82.2
Work in other place more than 6 months in total regi. residents%	3.27	5.00	1.96	3.24	3.43	3.66	1.30	1.21	2.68

Sources: COT, 1990a: 8–25; 2002a: 10–21, 28–33.

registered in other places. The residents in the *xiang* in Lhasa's suburbs usually had agricultural registration status. But the people with an agricultural status who lived in these four *xiang* accounted for only 46.8 percent of the total population with agricultural registration in Lhasa during the 1990 census. In July 1990, there were about 23,000 people who had lived in the Lhasa Urban District for longer than one year but held agricultural registration in other places, plus another 1,354 persons who had lived there for less than one year. The two groups made up 65.6 percent of Lhasa's agricultural residents. Why did so many farmers go to live in Lhasa for such a long time? The impression was that many of them earned part or all of their income as traders or craftsmen.

The situation did not change much in the 2000 census. In general, the percentage of agricultural registration holders among total residents in seven prefectures fell, from 17.8 percent in Nying chi to six percent in Chamdo. Lhasa is an exceptional case with a large urban population.

The distribution of these migrants interviewed in the 1988 survey by the date of their movement is presented in Figure 5.1 for all respondents, Figure 5.2 for urban Lhasa and Figure 5.3 for rural counties.

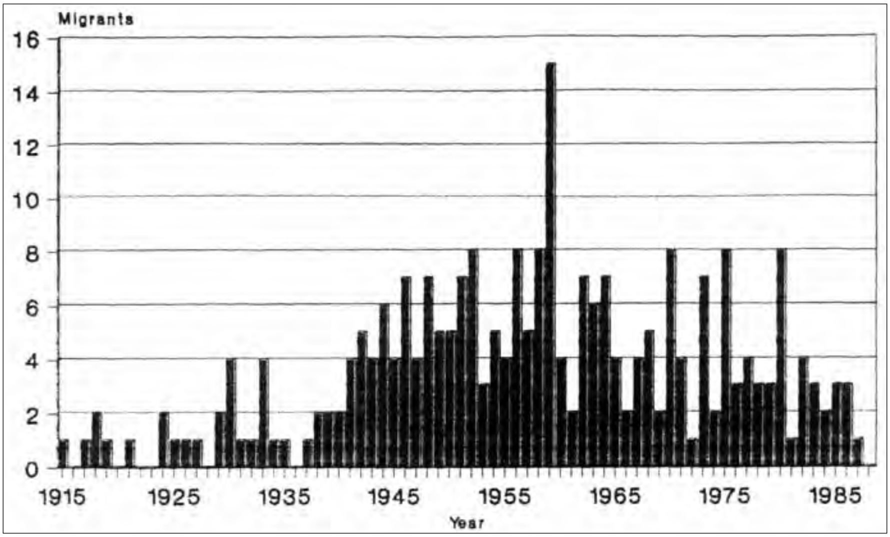


Figure 5.1. Migration of the Heads of Respondent Households for both Rural and Urban Areas (the 1988 Survey)

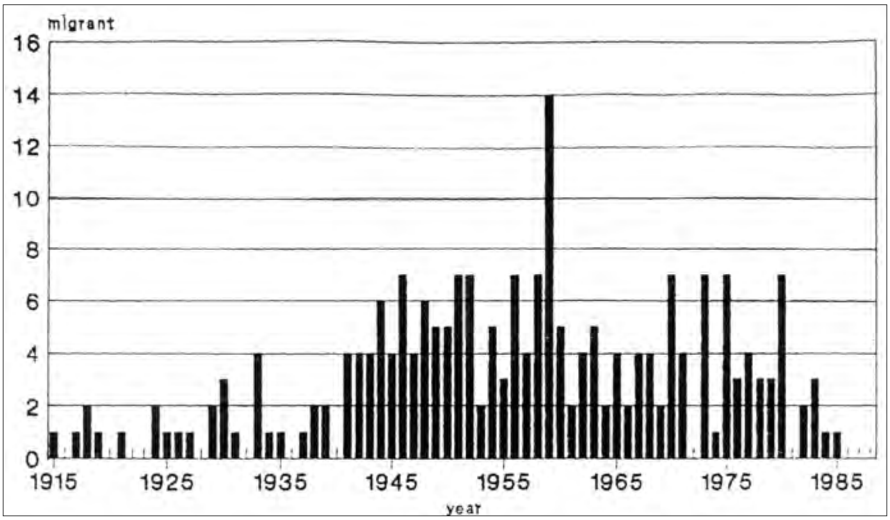


Figure 5.2. Migration of the Heads of Respondent Households in Lhasa (the 1988 Survey)

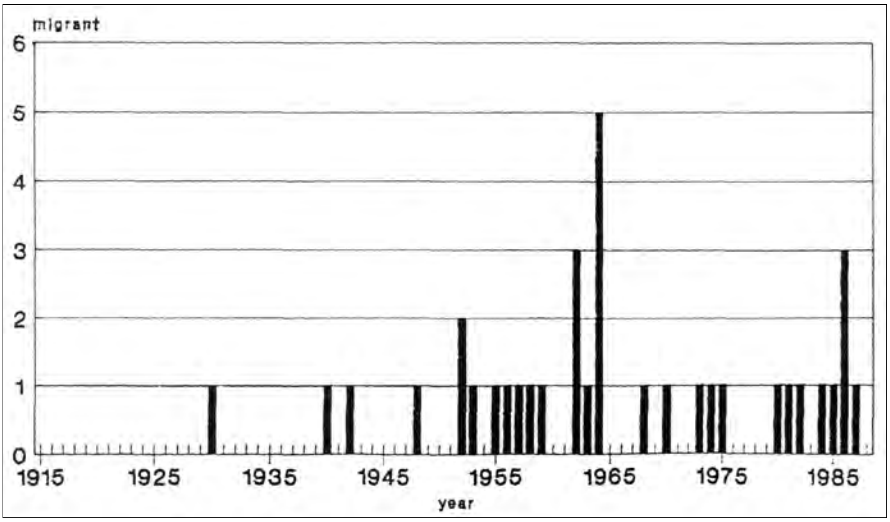


Figure 5.3. Migration of the Heads of Respondent Households in Rural Areas (the 1988 Survey)

Considerable migration took place in 1959. From Figure 5.2, it is clear that migration that year took place mainly in Lhasa (14 household heads). The respondents in the old urban area of Lhasa were mainly Tibetans (97.8 percent), so these migrants were Tibetans from other parts of the TAR who had moved into Lhasa. When aristocrats and senior monks left Lhasa to follow the Dalai Lama, another group of Tibetans, poor serfs and artisans would move to the city at the same time.

In comparing Figure 5.2 and Figure 5.3, we notice that the number of in-migrants in Lhasa's old urban district has increased since the 1940s, but declined in the 1980s.[3] This is different from the census results. The main reason for the difference was that the 1988 survey was based on official registrations. Some temporary in-migrants were not covered by our interviews but were covered by the census. Figure 5.2 illustrates that the control of registrations for in-migrants in Lhasa was strengthened, so the number of formal in-migrants declined.

Among a total of 438 migrants, 201 household heads provided information about their places of origin (Table 5.7). The migrants from Lhoka to Lhasa comprised 56.7 percent of the total and those from Chamdo 23.9 percent. The percentages of both groups have decreased since the 1950s. Migration between Lhasa and Shigatse was not large during these years. In general, migration between the two major cities in the same region should be more intensive compared with smaller towns. The exception is the migration between Lhasa and Shigatse, which might have religious and political explanations.

Two characteristics are illustrated in Table 5.6. The first is the center-oriented migration trend from other towns toward Lhasa. Second is the eastern-oriented trend from western parts of the TAR toward the eastern parts (Chamdo). We did not find any cases of migration from Chamdo to Shigatse or Lhoka.

Table 5.6. Changes of Places of Origin and Destination

Place of Origin	Place of Destination	Before 1952		1952–1959		1960–1980		1981–1988		Total	
		N	%	N	%	N	%	N	%	N	%
Chamdo	Lhasa	10	12.8	13	30.2	19	29.2	6	40.0	48	23.9
Shigatse	Lhasa	6	7.7	3	7.0	2	3.1	-	-	11	5.5
Lhoka	Lhasa	59	75.6	22	51.2	31	47.7	2	13.3	114	56.7
Naqu	Lhasa	-	-	1	2.3	-	-	-	-	1	0.5
Lhasa	Chamdo	-	-	-	-	3	4.6	1	6.7	4	2.0
Lhasa	Shigatse	-	-	-	-	1	1.5	3	20.0	4	2.0
Lhasa	Lhoka	-	-	2	4.7	8	12.3	2	13.3	12	6.0
Lhoka	Chamdo	3	3.8	1	2.3	1	1.5	1	6.7	6	3.0
Shigatse	Chamdo	-	-	1	2.3	-	-	-	-	1	0.5
Total		78	100.0	43	100.0	65	100.0	15	100.0	201	100.0

Occupational changes in migration

Table 5.7 presents the occupations of interviewed migrants before and after their move, compared with the occupational structure of the total.

Table 5.7. Occupational Change after Migration

Occupation	The old urban area (Lhasa)						Rural areas					
	Total Respondents		Migrants				Total Respondents		Migrants			
			Before migration		After migration				Before migration		After migration	
	Case	%	Case	%	Case	%	Case	%	Case	%	Case	%
Worker	123	24.6	24	11.0	63	28.9	6	0.9	0	0.0	0	0.0
Cadre	40	8.0	9	4.1	19	8.7	3	0.5	1	2.8	0	0.0
Teacher, etc.	3	0.6	1	0.5	2	0.9	0	0.0	1	2.8	0	0.0
Service	14	2.8	16	7.3	30	13.8	1	0.2	0	0.0	1	2.8
Handicrafts	0	0.0	8	3.7	19	8.7	0	0.0	2	5.5	1	2.8
Retired	39	7.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Monk	3	0.6	10	4.6	13	6.0	1	0.2	0	0.0	0	0.0
Herdsman	0	0.0	7	3.2	2	0.9	32	4.9	2	5.6	2	5.6
Farmer	8	1.6	88	40.4	8	3.7	579	88.1	29	80.6	31	86.1
Self-employed	78	15.6	1	0.5	23	10.6	29	4.4	0	0.0	1	2.8
Student	0	0.0	8	3.7	3	1.4	0	0.0	0	0.0	0	0.0
No-job	193	38.5	46	21.1	36	16.5	6	0.9	1	2.8	0	0.0
Total	501	100.0	218	100.0	218	100.0	657	100.0	36	100.0	36	100.0

Some migration took place before 1988, and these migrants might have changed their occupations again between when they moved and 1988. This possibility should be taken into account in any analysis. For example, 10 respondents reported their occupations as monks before migration: the number of monks increased to 13 after migration, but only three remained in their occupation as monks in 1988. The possibility is that these monks went to Lhasa in the 1950s, then changed their occupations during the Cultural Revolution under political pressure and government arrangement.

There are several characteristics of those who moved to Lhasa. First, the number of farmers declined from 88 to eight after migration. The increase in other occupations was due mainly to these former farmers. Second, the number of unemployed went from 46 to 36, meaning Lhasa provided jobs for some of them.

The difference between occupation after migration and occupations in 1988 might provide some insights. For example, service workers numbered 30 after migration but were reduced to 14 in 1988; the number of handicraftsmen was 19 after migration but zero in 1988. It is possible that these service workers and handicraftsmen still worked as individuals in the same business, but they did not report the formal status of their occupation, preferring to report themselves as unemployed. Under the planning economy system, people changed their view of "occupation". Even today, many Tibetans only consider the government jobs as "formal occupation". During our interviews in Lhasa, a Tibetan self-employed tailor complained to me about Han tailors from Jiangsu and Zhejiang (temporary migrants) who took some of his business. He insisted on reporting his occupation as unemployed, although I saw some work on his table.

Third, occupational groups that obviously increased were from the categories "worker" (from 24 to 63), "self-employed" (from one to 23), "service" (from 16 to 30), handicrafts (from eight to 19) and cadre (from nine to 19). The source of new cadres might have been new college graduates. Former farmers probably accounted for the increases in the other occupations.

The number of occupational changes for migrants in rural areas was not significant. Because the survey was conducted at destinations, the migrants we covered in villages were mainly rural-rural migrants. Farmers (80.6 percent) largely remained farmers (86.1 percent) after migration. The situation for herdsmen was the same. There was one cadre and one teacher who became farmers after migration. There may have been unusual reasons for their occupational changes. The two major reasons for downward movement in the social stratification in China are political or criminal.

In general, the occupational makeup in rural areas in the TAR is quite homogeneous. Farmers are the dominant group even among migrants, who are supposed to be the most active among rural residents. This reflects the low

development level of the market economy and multiple activities in rural TAR in 1988. Comparing the occupational structure after migration with that of total respondents in 1988, the percentage of farmers increased two percent in 1988. The increase in those self-employed accompanied the decrease in numbers of craftsmen and those in the service category, but their economic activities actually did not change. The limited increase in the percentages of cadres and workers might reflect the strengthening of the local administration.

The occupational breakdown of the TAR by city, town and rural (county) is introduced in Table 5.8 based on the 1990 census.[4] This table reveals the importance of Lhasa, because its employed population accounted for 83.7 percent of the total number of people employed in the city of the TAR.

A comparison between Table 5.7 and Table 5.8 of the Lhasa Urban District data shows that two occupations, cadre (our survey: 8.0 percent vs. census: 6.3 percent) and worker (our survey: 24.6 percent vs. census: 33.5 percent), were relatively close percentage-wise. There are large differences in the categories of farmer/herdsmen (our survey: 1.6 percent vs. census: 11.4 percent) and trade/service labor (our survey: 2.8 percent vs. census: 19.7 percent). The census found more farmers because it covered all residents in the suburbs. Our survey found fewer service and trade laborers because a large proportion of state-owned trade institution employees lived in work units not included in our survey. For the same reason, our survey did not cover professionals, most of whom were also under unit households. The census did not have a category for the unemployed under the full employment section for the traditional planned economy. The differences between the census and our 1988 survey in coverage and items reflected a different emphasis in design.

Table 5.8. Occupation Structure of the Labor Force in the TAR (1990)

Occupation	**Urban District**	**The TAR**			
	(Lhasa)	Total	City	Town	Rural
Professional	18.0	6.4	18.5	14.8	4.6
Cadre	6.3	1.9	6.2	4.6	1.2
Office staff	11.1	2.0	10.7	6.0	0.7
Trade worker	9.9	1.7	9.6	3.9	0.6
Service workers	9.8	1.5	9.4	4.6	0.4
Farmer/herdsman	11.4	79.0	12.3	46.1	88.7
Worker	33.5	7.5	33.3	20.0	3.8
Total (%)	100.0	100.0	100.0	100.0	100.0
Total	74799	1108891	89360	93359	901722

Source: The TAR 1990 Census Data.

The percentage of farmers/herdsmen was 93 percent in our 1988 survey and 88.7 percent in the census report for rural areas. According to the census, the second largest group was professional (4.6 percent) followed by worker (3.8 percent). Our survey suggested the order of the rural occupation structure as being: farmers (93.0 percent), self-employed (4.4 percent), workers (0.9 percent), unemployed (0.9 percent), cadre (0.5 percent), service laborers (0.2 percent) and monks (0.2 percent). The difference between the two in rural areas might be attributed to two causes: the census covered the administrative sites of the *xiang* government, where there were more cadres and professionals; our survey concentrated on the villages. The census covered the relatively advanced rural areas in Chamdo and Nying chi (Eastern TAR); these two prefectures were not included in our survey. Both sets of data can be used as references toward a better understanding of urban and rural society in the TAR.

Reasons for migration

The motives for migration are complex. First, the reported reason given in interviews might not be the most important, but a second or third reason. One may require an official reason, which would be acceptable for legally changing residency registration. In rural China marriage is a common reason given for rural-rural migration. Marriage is frequently a means by which a woman improves her standard of living by marrying a man living in a richer village or marrying into a rich family. Thus factors such as marriage and economics are closely intertwined, but in many instances, only the former is mentioned. Keeping these factors in mind, by studying the motives for migration, we can still make some headway toward understanding migration behavior.

Although the majority of migrants (about 87 percent) changed their occupations after migration, only 40 percent of them cited searching for jobs as their motive for migration (Table 5.9). It does not necessarily mean all 40 percent really changed their occupations, because some who moved to search for jobs might have taken up work in the same occupation as before. On the other hand, when they moved to Lhasa and entered a new socioeconomic environment, the likelihood of changing occupations increased. In fact 87 percent did change occupations. Those who reported their reason for migration as marriage or joining relatives (29.5 percent of the total) might have changed their occupation after their arrival. Some young men and women went to Lhasa to get married or to join their relatives, and it was common for them to work in a restaurant or hotel, or to open a private shop in the neighborhood.

A significant proportion of migrants (22.7 percent) cited religion as their reason for migration. There might be two types of religious migrants. Some wished to live

Table 5.9. Motives for Migration

Date of migration	Motive of migration	Old urban area (Lhasa)		Rural	
		Case	%	Case	%
Before 1952	Marriage	11	16.2	1	25.0
	Family union	7	10.3	-	-
	Education	-	-	-	-
	Religion	26	38.2	1	25.0
	Job search	18	26.5	2	50.0
	With parents	6	8.8	-	-
	Other	-	-	-	-
	Subtotal	68	100.0	4	100.0
1952–1959	Marriage	2	5.9	1	16.7
	Family union	4	11.8	2	33.3
	Education	-	-	-	-
	Religion	7	20.6	-	-
	Job search	19	55.9	2	33.3
	With parents	2	5.9	1	16.7
	Other	-	-	-	-
	Subtotal	34	100.0	6	100.0
1960–1980	Marriage	11	20.0	-	-
	Family union	10	18.2	1	14.3
	Education	1	1.8	-	-
	Religion	3	5.5	1	14.3
	Job search	27	49.1	4	57.1
	With parents	2	3.6	1	14.3
	Other	1	1.8	-	-
	Subtotal	55	100.0	7	100.0
1981–1988	Marriage	3	50.0	1	25.0
	Family union	-	-	-	-
	Education	-	-	-	-
	Religion	1	16.7	-	-
	Job search	1	16.7	3	75.0
	With parents	-	-	-	-
	Other	2	16.7	-	-
	Subtotal	6	100.0	4	100.0
Total	Marriage	27	16.6	3	14.3
	Family union	21	12.9	3	14.3
	Education	1	0.6	-	-
	Religion	37	22.7	2	9.5
	Job search	65	39.9	11	52.4
	With parents	10	6.1	2	9.5
	Other	2	1.2	-	-
	Subtotal	163	100.0	21	100.0

in Lhasa (the holy city) and have daily access to holy sites. Others, mainly monks or nuns, who had returned to secular life during the Cultural Revolution, wanted to return to their monasteries. Examining the justifications for migration by dates we found that 26 migrants who moved before 1952, and seven from 1952 to 1959, cited religion as their primary reason. These 33 fell into the first category. There were only four migrants who cited religion as their reason for moving to Lhasa from 1960 to 1988; this group might belong to the second category.

The percentage of migrants who said marriage was their main reason for migration was 16.6 percent in urban Lhasa and 14.3 percent in the rural counties. Half of the in-migrants in Lhasa from 1981 to 1988 offered this motive for their moves. Though their number was not large, it does demonstrate that marriage was a major legal channel for in-migration to the capital of the TAR.

Joining relatives was another frequent legal/official reason to change residency in China. Many people who report moving for this reason actually migrated for economic reasons. Those who gave this reason in our survey mainly did so before the 1980s. In fact, since the 1980s, temporary migrants who went to Lhasa to make money have increased while legal in-migrants to Lhasa, who cited joining relatives as their reason, have declined. This reflects a tightening of registration control in urban Lhasa and that joining relatives is no longer an acceptable reason for registration transfer into Lhasa.

Four justifications (searching for a job, religion, marriage and joining relatives) together made up 92.1 percent of the migrants interviewed. Those who claimed to have moved with parents made up 6.1 percent of the total. This tells us that in the previous period, there were some family migrations but individual migrants have now become the norm.

Among migrants in rural areas, 52.4 percent claimed they moved to search for jobs. This suggests that economic motives became the primary factor in rural-rural migration in the TAR. According to my research in 41 villages in Inner Mongolia in 1985, 44.7 percent of the total 889 migrants claimed "searching for a higher income" as their reason to move (Ma Rong, 1989: 49). There are similarities in rural-rural migration in Inner Mongolia and Tibet.

The relationship to destination before migration

A process of spontaneous migration usually has several steps: considering moving because something is unsatisfactory at the present residence, comparing the different potential destinations and estimating future possibilities, selecting the destination, making the decision and moving, and adjusting to the new environment. Therefore, access to reliable information about the destination becomes key to making rational decisions.

Our survey suggested that half of the migrants in rural and urban Lhasa had relatives at their destination and half did not (Table 5.10). No large rural-urban differentials were found in the TAR in this respect. In comparison with our survey in Inner Mongolia, 30.8 percent of in-migrants to towns had relatives there before migration (25.4 percent had direct relatives, such as parents, brother or sisters) and 64.6 percent of in-migrants to villages had relatives before moving (5.8 percent had direct relatives) (Ma Rong, 1989: 52).

Table 5.10. Having Relatives at Destination before Migration

	Old urban area (Lhasa)		Rural		Total	
	Case	%	Case	%	Case	%
Have relative(s) at destination	106	48.4	8	53.3	114	48.7
Do not have relative(s)	113	51.6	7	46.7	120	51.3
Total	219	100.0	15	100.0	234	100.0

Comparison between migrants and natives

When people decide to migrate, regardless of the reason they give, they always do so in the hope of improving their work and living conditions. There are two reference systems in this comparison. The first is to compare their present lives with that at their places of origin. The second is to compare their lives with the natives at their current residences. If they are better off compared with their previous lives, they will not regret their migration. But if there is a large gap between their lives compared with that of their neighbors, their feeling of well-being will fade.

Table 5.11 compares migrants and natives in the TAR. In the old urban area of Lhasa, the average age of migrant heads of households was higher than their native counterparts with a similar period of schooling (1.1 years). Migrants' per capita income was much higher than that of natives in 1987 (1,175 yuan vs. 864 yuan). Among migrants who moved to Lhasa in different years, those who went in the 1980s had the highest income (2,516 yuan) and those who went from 1960 to 1980 earned the least. The migrants from the 1980s were traders and self-employed or private businessmen of various service professions. They were generally young, with 3.5 years of schooling and some skills. They went to Lhasa under the new political and economic environment and were able to engage in construction, trade and private services. It is not surprising that this group earned the highest incomes.

Table 5.11. Comparison between Migrant and Native Household Heads (1988)

Date of Migration	Old urban area (Lhasa)				Rural counties			
	Case	Age (average)	Years in school (average)	Income per capita (1987)	Case	Age (average)	Years in school (average)	Income per capita (1987)
Before 1952	60	63.4	0.6	1163	4	69.3	0.0	1046
1952–1959	31	59.5	1.1	1181	7	56.7	0.0	645
1960–1980	51	46.7	1.6	976	10	43.3	1.3	456
1981–1988	8	42.5	3.5	2516	8	43.5	1.4	347
Total migrants	150	56.1	1.1	1175	29	50.2	0.8	553
Natives	384	51.3	1.1	864	631	46.0	0.9	559

The per capita income between migrants and natives was very similar in the rural areas (553 yuan vs. 559 yuan). Unlike the situation in Lhasa, the most recent migrants had the lowest incomes. The migrants who went in the 1980s were younger and even though they had relatively more education they earned only 347 yuan. What is the reason for this low income?

One explanation is that rural areas of the TAR are usually conservative and do not welcome strangers. The in-migrants who went in the 1940s and 1950s were eventually accepted by the local community as a result of land reform. After a long period of adjustment and many interactions, they were gradually treated as community members with equal rights. In rural areas, good opportunities (better income, better quality land, big gardens, etc.) are usually given to respected members of the local community, not to newcomers. As reflected in Table 5.8, more than 80 percent of the migrants in rural areas were farmers, not self-employed types or professionals. These new arrivals had no special skills with which to compete with the natives in the labor market. They did not have advantages in savings or property (housing, gardens, wells and agricultural equipment, which were generally left at their places of origin). Neither good work nor good land was assigned to them. Therefore, their incomes were, not surprisingly, lower than those of the others.

Economic activities while traveling

Since the early 1980s restrictions on travel have largely been abandoned. Many Han businessmen, artisans and workers went to the TAR to investigate money-making opportunities. One estimate suggests that among the temporary migrants in the TAR in the late 1980s, 50.5 percent were from Sichuan, 7.8 percent from Gansu, 7.7 percent from Qinghai, 6.8 percent from Zhejiang and 4.4 percent from Anhui (Liu Rui, 1988: 153).

Influenced and stimulated by these migrants from other provinces, local Tibetans joined the flow of temporary migration. Several questions were in our survey to give an idea of the relationship between travel and economic activities. Travel to other places was defined as crossing county boundaries.

From Table 5.12 we can see that Lhasa residents traveled more often than rural peasants. Among the interviewed residents, 37 percent visited other places in 1987. In contrast, 77.5 percent of rural respondents reported that they had not traveled out of their counties that year. But we found that a group of rural residents traveled frequently. Compared with two percent of Lhasa residents, 4.2 percent of rural residents traveled four or more times. Therefore, there are two extremities in rural Tibet: some never leave their county and some travel often. Although new economic policies have encouraged entrepreneurial Tibetans to engage in commerce, it should be noted that in the years before 1950 some rural families, especially those in polyandrous marriages, routinely assigned one male member as a trader. This practice brought the family much needed outside income.

Table 5.12. Going out of the Registered County in 1987

	Old urban area (Lhasa)		**Rural counties**		**Total**	
	Case	%	Case	%	Case	%
No travel	186	63.1	487	77.5	673	72.9
Once	80	27.1	54	8.6	134	21.5
2 times	16	5.4	30	4.8	46	5.0
3 times	5	1.7	30	4.8	35	3.8
4–10 times	5	1.7	23	3.7	29	3.1
11–20 times	1	0.3	3	0.5	4	0.4
Total	295	100.0	628	100.0	923	100.0

Few Lhasa residents travel for business. Among the traveling respondents (109), three-fourths of the Lhasa residents traveled for non-economic activities, such as to visit relatives or friends. There are many seasonal tourists and pilgrims in Lhasa. If Lhasa residents want to engage in trade and services, there is no need for them to go elsewhere. Among the 141 rural residents who traveled outside, 97 (68.8 percent) went for economic purposes, and some of them, 46 (32.6 percent), stayed outside for more than one month. This is a reverse of the pattern for Lhasa residents.

Did they make their fortunes by travel and work far away from home? About 30.3 percent of Lhasa residents who traveled outside reported that they did not make a profit (Table 5.13). The number of unsuccessful rural travelers was higher (74.2 percent). It is common for people to under-report their income and over-report their expenses. At least the report shows the gaps between Lhasa and rural areas

in economic opportunities. It seems that it is easier to make money in Lhasa, and Lhasa residents are also more reluctant to travel.

Table 5.13. Use of Money Earned from Activities Travel outside Home (1988)

Usage of the Money	Lhasa		Counties		Total	
	Residents	%	Residents	%	Residents	%
Did not earn money outside	123	30.3	479	74.2	602	57.2
Continued trade	24	5.9	6	0.9	30	2.8
Agri/pastoral activities	9	2.2	109	16.9	118	11.2
Handicrafts	6	1.5	2	0.3	8	0.8
Improving daily life	183	45.1	39	6.0	222	21.1
Saved in bank	7	1.7	3	0.5	10	1.0
Built houses	13	3.2	8	1.2	21	2.0
Donated to monastery	26	6.4	0	0.0	26	2.5
Others	15	3.7	0	0.0	15	1.4
Total	406	100.0	646	100.0	1052	100.0

Our questionnaire asked respondents how they used the money earned from travel and work outside their hometowns. Among the Lhasa residents who traveled and worked outside Lhasa, 69.7 percent made a profit, but only 5.9 percent said that they would use it for future investments. Meanwhile, 45.1 percent said they would use the money to improve their lives (mainly housing, food, clothing, consumer goods). What they undertook was generally a small business (a repair store, a tea-house, a small restaurant, or joining a construction team, etc.). For the high percentage of rural respondents who did not earn money from their travels, one explanation is that they went on pilgrimages and did not engage in any money-making business; another explanation is they did not want to report their earnings despite having made some money.

In contrast, among the peasants who did make a profit, the majority would invest the money in agricultural production. In their opinion, agriculture is a more reliable and long-term business. Improving their lives was a secondary concern, followed by building a house.

The 2005 Temporary Migration Survey in Lhasa

The 2005 Lhasa survey was part of a research series organized by ISA. The project carried out questionnaires administered in six cities in China's West: (1) Lhasa; (2) Urumqi (capital of the Xinjiang Uyghur Autonomous Region); (3) Yinchuan (capital of the Ningxia Hui Autonomous Region); (4) Lanzhou (capital of Gansu Province),

(5) Xining (capital of Qinghai Province), and (6) Golmud (the key intermediate city of the Qinghai-Tibet railway in western Qinghai).

Twenty students from the Department of Tibetan Language and Literature at Tibet University joined the interview team. Among the 20 interviewers, six were female, and six were from Chamdo and spoke the Kham dialect. They were mixed into small groups during interviews. The interviews were conducted by the research team in Lhasa Urban District from September 25 to October 20, 2005, and 1,470 people were interviewed. The local public security stations only have limited management of temporary migrants. For example, they issued only 11,185 temporary residential cards in the summer of 2000 but the estimated total number of temporary migrants was around 170,000. Migrants generally did not refuse to answer our questions, but we had to keep the questionnaire short and complete the conversation within 20 to 30 minutes. That was why only questions providing the most needed information were asked.

The respondents in Lhasa were selected carefully as target groups: (1) workers employed by construction companies. Based on local statistics provided by the Lhasa Urban Construction Bureau, three companies were selected from 148 construction companies with headquarters outside the TAR; (2) small shop owners in retail sales; (3) gardeners producing vegetables in the northern suburbs; (4) cooks, waiters and waitresses; and (5) taxi drivers as a special occupation filled mainly by temporary migrants (Table 5.14).

Table 5.14. Distribution of Respondents in the 2005 Lhasa Survey

Occupation (Locations)	Respondents	%
Lhasa taxi drivers	226	15.4
Construction field (west suburb)	68	4.6
"Zuo-An" Coffee	5	0.3
"Tao-Yuan" Restaurant	12	0.8
"Sun Island" apartment areas	25	1.7
"Jiangsu" Restaurant	93	6.3
Shol Residential Committee	91	6.2
Construction field (Bank) (west suburb)	44	3.0
Barkhor (intermediate circuit) Lugu Residential Committee	220	15.0
Tromzigang Market	249	17.0
Tromzigang street salesmen (north suburb)	140	9.5
Tea house, vegetable farmers	128	8.7
"Tian-Lu" temporary labor market	24	1.6
Temporary laborer on street	5	0.3
"Xiang Ba La" Restaurant	9	0.6
Small item market (International Town)	39	2.7
"Small Swan" Restaurant (International Town)	15	1.0
Renting apartments (International Town)	21	1.4
Gold-silver craftsmen (International Town)	12	0.8
Total	1,467	100.0

Age structure and sex ratio of temporary migrants

Among the 1,470 respondents, 1,022 were males (69.5 percent) and 441 were females (30.3 percent). Two-thirds of the total temporary migrants were 21 to 40.

Table 5.15. Age Structure of Temporary Migrants in the 2005 Survey

Age group	Population	%
1–10	1	0.0
11–20	203	13.8
21–30	487	33.1
31–40	492	33.5
41–50	206	14.0
51–60	41	2.8
61–70	7	0.5
71–80	1	0.0
Missing	32	2.2
Total	1,470	100.0

In order to double check the age distribution of our survey samples, we also examined the records kept by public security stations of temporary migrants (Table 5.16). Among the 7,420 temporary migrants registered in the Public Security Station of Beijing Zhonglu, 4,519 (60 percent) were males and 2,674 (36 percent) were females while the gender status for the other 227 was missing in the records.

Table 5.16. Age Structure of Temporary Migrants Registered in Beijing Zhonglu Public Security Station (2005)

Age group	Population	%
10–15	3	0.0
16–25	1,101	14.8
26–35	2,786	37.5
36–45	2,253	30.4
46–55	522	7.0
56–65	75	1.0
66–75	4	0.1
Missing	626	8.4
Total	7,420	100.0

From similarities in the above tables, it is clear that the quality of our sample in the 2005 survey is valid. It is also clear that most of the temporary migrants were in the 25–45 age group. They were the people who went to Lhasa to work.

The date temporary migrants went to Lhasa

From Figure 5.4, the migration flows in Lhasa can be divided into three periods. The first period is from 1980 to 1995 with some increase but also a decline by 1989. In-migration increased significantly from 1995 to 1999. The most rapid growth of temporary migrants took place from 2000 to 2005. Among the 1,470 respondents in the 2005 Survey, 68.1 percent went to Lhasa from 2000 to 2005; 77.8 percent of them had stayed in their current jobs longer than one year.

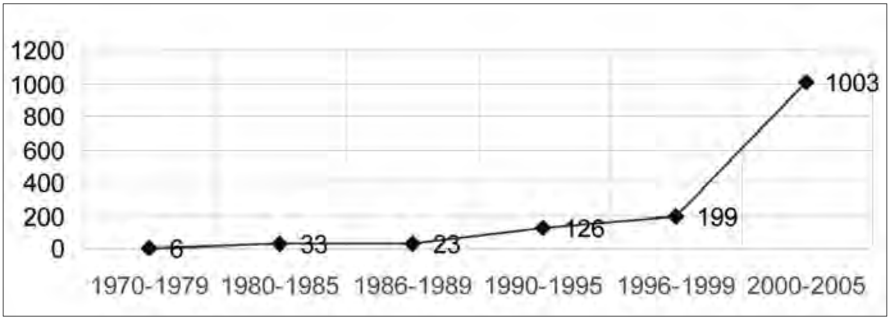


Figure 5.4. The Time Migrants Came to Lhasa

The place of origin of migrants in Lhasa

Sichuan and Gansu produced 54.6 percent of temporary migrants (Table 5.17). Other parts of the TAR contributed only 13.8 percent to the migration flow although they had the advantage of geographic proximity. Han from Sichuan and Hui from Gansu have some advantages in the following services: restaurants, retail sales, vegetable growing, transportation, etc. Tibetans own small hotels, sell handicrafts, run tea houses, etc. There was some competition among small shops and restaurants.

Table 5.17. The Place of Origin of Temporary Migrants in Lhasa (2005)

Origin	Migrants		Origin	Migrants	
	#	%		#	%
Sichuan	445	30.3	Zhejiang	16	1.1
Gansu	357	24.3	Jiangsu	9	0.6
TAR	204	13.8	Hunan	9	0.6
Henan	111	7.6	Shandong	8	0.5
Hebei	57	3.9	Ningxia	6	0.4
Chongqing	54	3.7	Jiangxi	5	0.3
Qinghai	37	2.5	Liaoning	3	0.2
Yunnan	21	1.4	Shanxi	1	0.1
Anhui	21	1.4			
Shaanxi	18	1.2	Total	1,470	100.0

Job stability of temporary migrants in Lhasa

For management purposes, since 2005 the Lhasa authority has asked temporary migrants to register and apply for temporary resident cards (valid for 12 months) if visitors planned to stay in Lhasa longer than 30 days, and to apply for an extension when the card expired. Therefore, local public security stations have used one month as the term for measuring temporary residence. In Chinese censuses, a person who lives in one place A longer than six months and officially registers in another place B, or lives in that place (A) less than six months but has been away from the registered place for longer than six months, should be covered by the census in place A. Six months is another term in Chinese censuses for measuring migration.

The main goal of people who move to cities is to find stable and well-paid jobs compared with earnings at their places of origin. In order to stay and live in cities in a sustainable way, it is of prime importance to find a stable job. In order to measure the employment situation of temporary migrants in Lhasa, where many people go by season (arrive in summer and fall, and leave in winter), 12 months is the benchmark term. Therefore, to gauge their job stability, our questionnaire asked whether they had been engaged in their current job for "longer than one year" or "less than one year." The results of our survey show that 77.8 percent of the migrants in Lhasa had worked on their current jobs for longer than one year (Table 5.18). Only 22.2 percent, including newcomers, had worked on their current jobs for less than one year. Job stability provides migrants with a stable income and an environment in which they can learn skills.

Table 5.18. How Long Have Migrants Been Engaged in Current Job (2005)

	Frequency	Percent	Valid Percent
Longer than 1 year	1,066	72.5	77.8
Less than 1 year	305	20.7	22.2
Total	1,371	93.3	100.0
Missing	99	6.7	
Total	1,470	100.0	

Estimated period of stay in Lhasa

Even when their jobs were relatively stable, not many migrants planned to stay for a long time in Lhasa. Among all respondents, 704 gave estimates for how long they planned to stay in Lhasa. The largest groups planned to stay in Lhasa for one year (18.5 percent) and two years (21.9 percent). Some planned to stay for three years or longer (Table 5.19). Tibetans seem to stay for shorter periods than do Han. A

total of 57.6 percent of Tibetan migrants planned to leave Lhasa within two years. The Han migrants traveled a very long distance, so they needed to stay longer to recoup their investment and travel costs. Among the Han and Hui, there were groups (86 and 19 persons respectively) who intended to stay longer than 10 years. The majority of migrants planned to stay in Lhasa for one year to three years; only a small proportion of them might become permanent residents.

Table 5.19. Estimated Period of Stay in Lhasa (2005)

Year	Han		Hui		Tibetan		Others		Total	
	count	%	count	%	count	%	Count	%	count	%
0.5	4	0.8	0	0.0	1	1.0	1	5.9	6	0.9
1.0	86	16.7	14	19.4	29	29.3	1	5.9	130	18.5
1.5	4	0.8	0	0.0	0	0.0	0	0.0	4	0.6
2.0	108	20.9	12	16.7	27	27.3	7	41.2	154	21.9
2.5	8	1.6	0	0.0	0	0.0	1	5.9	9	1.3
3.0	82	15.9	12	16.7	10	10.1	1	5.9	105	14.9
3.5	2	0.4	0	0.0	0	0.0	0	0.0	2	0.3
4.0	21	4.1	0	0.0	7	7.1	0	0.0	28	4.0
4.5	1	0.2	0	0.0	0	0.0	0	0.0	1	0.1
5.0	88	17.1	9	12.5	13	13.1	3	17.6	113	16.1
5.5	1	0.2	0	0.0	0	0.0	0	0.0	1	0.1
6.0	9	1.7	4	5.6	2	2.0	1	5.9	16	2.3
7.0	4	0.8	1	1.4	1	1.0	0	0.0	6	0.9
7.5	1	0.2	0	0.0	0	0.0	0	0.0	1	0.1
8.0	10	1.9	1	1.4	0	0.0	2	11.8	13	1.8
9.0	1	0.2	0	0.0	0	0.0	0	0.0	1	0.1
10.0	70	13.6	13	18.1	5	5.1	0	0.0	88	12.5
11.0	1	0.2	0	0.0	0	0.0	0	0.0	1	0.1
13.0	1	0.2	0	0.0	0	0.0	0	0.0	1	0.1
14.0	1	0.2	0	0.0	0	0.0	0	0.0	1	0.1
15.0	1	0.2	3	4.2	1	1.0	0	0.0	5	0.7
18.0	1	0.2	0	0.0	0	0.0	0	0.0	1	0.1
20.0	10	1.9	3	4.2	2	2.0	0	0.0	15	2.1
30.0	1	0.2	0	0.0	1	1.0	0	0.0	2	0.3
Total	516	100.0	72	100.0	99	100.0	17	100.0	704	100.0

Potential destination of future movement

Among the total 1,470 respondents, 949 (64.5 percent) answered the question "Where would be your potential destination, if you plan to leave Lhasa?" The others who did not answer this question did not have clear plans or wanted to stay in Lhasa or travel abroad. Among those temporary migrants who answered this question, the

majority (78.8 percent) planned to return home. Hui seemed less intent on returning home compared with others. A total 12.7 percent of Han migrants were considering moving to other cities in other provinces or regions. In contrast, only 3.7 percent of Tibetan migrants considered moving to other provinces. Table 5.20 shows clearly that the majority of these migrants were truly temporary residents of Lhasa.

Table 5.20. Potential Destination if Leaving Lhasa (2005)

Ethnic group		**Potential destination**				
		Back home	Other city at home province	Other city in other province	Total	Did not answer
Han	Count	644	71	104	819	171
	%	78.6%	8.7%	12.7%	100.0%	
Hui	Count	104	29	11	144	19
	%	72.2%	20.1%	7.6%	100.0%	
Tibetan	Count	178	31	8	217	58
	%	82.0%	14.3%	3.7%	100.0%	
Others	Count	23	0	1	24	18
	%	95.8%	.0%	4.2%	100.0%	
Total	Count	949	131	124	1,204	266
	%	78.8%	10.9%	10.3%	100.0%	

Religious beliefs of temporary migrants

In general, differences in people's religious beliefs can pose barriers to their interaction. Some religions disapprove of people from other religions; other religions are more open and tolerant. That is why we looked at the religious affiliations of temporary migrants in Lhasa. Among the respondents of the 2005 Survey, 369 said that they were Buddhists. There were only 235 Tibetans, which means a number of Han claimed to be Buddhists. Since there were 163 Hui migrants covered in this survey, that means at least six people from other groups claimed their religion as Islam.

Table 5.21. Religious Groups of Temporary Migrants in Lhasa (2005)

Religious Group	**Population**	**%**
Tibetan Buddhism / Buddhism	369	25.1
Muslim	169	11.5
No religion	323	22.0
Others	88	6.0
No answer	521	35.4
Total	1,470	100.0

Marriage and family of temporary migrants

The family is an elemental component of society. Marriage and family life affect the decision to migrate, the duration of stay, economic activities, involvement in the local community and ethnic interaction of temporary migrants.

Among the 1,470 respondents of the 2005 survey, 964 (64.4 percent) were married. The earliest marriages went back to 1953. Among all married migrants, one percent married from 1960 to 1969, 3.6 percent from 1970 to 1979, 29.4 percent from 1980 to 1989, 44 percent from 1990 to 1999, and 22 percent from 2000 to 2005. Their marriage dates were closely related to their ages.

Research shows a relatively higher intermarriage rate among migrants compared with native residents in Inner Mongolia (Ma Rong and Pan Naigu, 1988b: 83). The majority of married migrants in Lhasa married within their own group (Table 5.22). But a few intermarriages did take place in Lhasa. Among 657 married Han migrants, 12 married Tibetan women and four married Hui. Among 135 married Tibetan migrants, three married Han and two married Hui.

Table 5.22. Marriage Patterns of Temporary Migrants in Lhasa (2005)

Ethnic status of migrant	**Ethnic status of spouse**				**Total**
	Han	Hui	Tibetan	Others	
Han	640	4	12	1	657
Hui	1	78	5	1	85
Tibetan	3	2	130	0	135
Others	1	1	0	12	14
Total	645	85	147	14	891

Among the 640 Han-Han couples, 536 (83.8 percent) of their spouses came from their hometowns (the same village or neighbor villages); they met at home. Another 55 (8.6 percent) married spouses from their province of origin. Many of them probably met in Lhasa and married because, among other reasons, they shared the same dialect and geographic identity. Only 22 (3.4 percent) married someone from another province. Among the 130 Tibetan-Tibetan couples, 97 (74.6 percent) married spouses from their hometowns, 21 (16.2 percent) married spouses from the same province, and seven (5.4 percent) married spouses from other provinces. This marriage pattern shows that the majority of temporary migrants in Lhasa, regardless of their ethnic status, came from rural communities and still kept close contact with their home villages.

School enrollment of migrants' children

The interviews confirmed our impression that most temporary migrants left their children at home to be raised and educated. Among 754 respondents who reported having school-age children, 542 (71.9 percent) left their children to attend school at home. A total 89 (11.8 percent) of these reported having difficulties paying tuition fees. About 198 (26.3 percent) of the temporary migrants sent their children to school in Lhasa.

Table 5.23. School Enrollment of Migrants' Children (2005)

Ethnic group	Location to attend school										Total	
	Lhasa		Hometown		Lhasa with difficulties		Home with difficulties		Out of school			
	#	%	#	%	#	%	#	%	#	%	#	%
Han	71	12.0	404	68.2	38	6.4	69	11.7	10	1.7	592	100.0
Hui	11	18.0	27	44.3	4	6.6	18	29.5	1	1.6	61	100.0
Tibetan	49	54.4	18	20.0	19	21.1	2	2.2	2	2.2	90	100.0
Others	1	9.1	4	36.4	5	45.5	0	0.0	1	9.1	11	100.0
Total	132	17.5	453	60.1	66	8.8	89	11.8	14	1.9	754	100.0

More Tibetan migrants (75.5 percent) took their children to Lhasa for education and 21.1 percent reported having financial difficulties. In comparison, only 18.4 percent of Han migrants did the same with their school-age children. One purpose for migrating elsewhere to get a job is to earn more money to pay for children's education. Because of demand, a school named Yu-cai (literally, talent training) was established in Lhasa to recruit more than 1,000 students from migrants' families. This school offers all grades from primary to high school, and hires teachers from other provinces at a high salary. Its school buses run along the main streets of Lhasa.

Educational background of temporary migrants

About 10 percent of migrants in Lhasa are illiterate. The junior middle school graduates are the largest group (45.7 percent) of migrants, representing general progress in recent years of the National Nine-Year Compulsory Education Project. This project provides basic education (primary and junior middle school) for all Chinese citizens with no charge for tuition. A total 15.5 percent of the migrants received high-school education.

Table 5.24. Education of Temporary Migrants by Ethnicity (2005)

Education	Han		Tibetan		Hui		Other		Total	
	#	%	#	%	#	%	#	%	#	%
Illiterate	32	3.3	76	32.3	29	19.9	0	0.0	137	10.0
Primary	148	15.3	83	35.3	64	43.8	13	48.1	308	22.4
Junior middle sch	518	53.7	61	26.0	42	28.8	7	25.9	628	45.7
High school	187	19.4	12	5.1	9	6.2	5	18.5	213	15.5
Professional sch	35	3.6	2	0.9	2	1.4	1	3.7	40	2.9
College (2 year)	29	3.0	1	0.4	0	0.0	1	3.7	31	2.3
University	16	1.7	0	0.0	0	0.0	0	0.0	16	1.2
Total	965	100.0	235	100.0	146	100.0	27	100.0	1373	100.0

The illiteracy rate was only 3.3 percent for Han, 32.3 percent for Tibetans and 19.9 percent for Hui. The Tibetan migrants were less educated compared with other groups. Among the Han migrants, 53.7 percent had a junior middle-school education, 19.4 percent had a high-school education and 8.3 percent received more education than high school.

Occupational Change

Among the 1,395 respondents who answered the questions about channels to find their current jobs, a large proportion (45.3 percent) said that they found their jobs by themselves. This group consisted of 38.4 percent among the Han and 68.4 percent among the Tibetans. Relatives, friends and fellow villagers, the other channels for job searches, made up 40.9 percent of the total (Table 5.25).

Table 5.25. Channels of Employment of Temporary Migrants (2005)

Channel of employment	Ethnic Group									
	Han		Tibetan		Hui		Others		Total	
	#	%	#	%	#	%	#	%	#	%
No job	3	0.3	0	0.0	0	0.0	0	0.0	3	0.2
Middle man	16	1.7	1	0.4	3	1.9	1	3.7	21	1.5
By self	364	38.4	182	68.4	79	51.0	9	33.3	634	45.4
Village fellow	139	14.7	20	7.5	14	9.0	7	25.9	180	12.9
Friends	131	13.8	15	5.6	22	14.2	2	7.4	170	12.2
Relatives	168	17.7	34	12.8	16	10.3	2	7.4	220	15.8
Self-employed	62	6.5	8	3.0	12	7.7	4	14.8	86	6.2
Family business	18	1.9	0	0.0	3	1.9	1	3.7	22	1.6
Work for relative/friend	16	1.7	4	1.5	6	3.9	0	0.0	26	1.9
Construction	30	3.2	2	0.8	0		1	3.7	33	2.4
Total	947	100.0	266	100.0	155	100.0	27	100.0	1,395	100.0

There were ethnic differences among the job-searching channels. Han relied more on fellow villagers, friends and relatives (46.2 percent). Hui migrants also had their own networks of friends and relatives, while Tibetans relied more on themselves. Middle men played a very limited role (1.5 percent) in job searches. The pattern is similar in other western cities such as Urumqi (Ma Rong, et al. 2005).

Table 5.26. Occupational Change of Temporary Migrants (2005)

Previous occupation	number	%	Occupation in Lhasa	number	%
In school	112	7.6	Cadre, manager	9	0.6
Cadre, manager	29	2.0	Professional	17	1.2
Professional	14	1.0	Skilled labor	39	2.6
Skilled labor	55	3.7	Office staff	8	0.5
Office staff	7	0.5	Service labor	961	65.4
Service labor	335	22.8	Non-skilled labor	139	9.5
Non-skilled labor	125	8.5	Guards	1	0.1
Soldier	9	0.6	Farmer	10	0.7
Farmer	440	29.9	No job	10	0.7
No job	97	6.6	Others	46	3.1
Others	97	6.6	Self-employed	150	10.2
Self-employed	21	1.4	Missing	80	5.4
Missing	129	8.8			
Total	1,470	100.0	Total	1,470	100.0

Many temporary migrants changed their occupation after coming to Lhasa. Table 5.26 shows that 30 percent of these temporary migrants were farmers before moving. A total 22.8 percent previously worked in services, compared with 65.4 percent of temporary migrants who now work in services. Another 10.2 percent of migrants in Lhasa described themselves as self-employed businessmen. Ten reported that they remained farmers: these were vegetable gardeners in the suburbs. Three-fourths of the temporary migrants worked in services, confirming our impression that the majority of temporary migrants worked in the service sector.

About 84 percent respondents claimed that they were satisfied with their current jobs. Only 16 percent said they were unsatisfied. Attitudes toward current jobs were very similar across the ethnic groups in Lhasa.

Income and consumption of migrants

The living conditions of temporary migrants vary by location. Migrant laborers working in construction teams have the worst living conditions. They inhabit temporary tents with no running water or heating. Those working in trade and

services can usually rent or share an apartment, and therefore enjoy better conditions. Taxi drivers who make more money can afford better housing in the suburbs.

In choosing residential locations, 38.8 percent of the respondents preferred to live near their work sites and 50.0 percent said they had other preferences (e.g., rent, condition of housing, etc.) than proximity to their work sites. We assumed that migrants would prefer to live near or share housing with those from the same ethnic groups. But the survey reveals a different reality. The vast majority of respondents (84 percent) denied that ethnic considerations factored into their housing selection, and only five percent said they preferred to stay with people from the same ethnic group.

Income is a private issue everywhere, so it is very difficult to obtain information on temporary migrants' income in Lhasa. Because the interviews took place at work sites, people hesitated to mention their income in front of their co-workers. A total 1,184 respondents (80.5 percent) responded to the question about their annual income (Table 5.27). According to their answers, 65.3 percent of them earned less than 10,000 yuan annually, or 833 yuan per month. The few (4.9 percent) who reported their income to be less than 1500 yuan might have been new arrivals or people who had been unemployed for a period of time. Meanwhile, about eight percent of migrants earned more than 25,000 yuan, or 2,083 yuan per month. Therefore, there were many poor migrants while a few were relatively rich.

Table 5.27. Annual Income Distribution of Temporary Migrants in Lhasa (2005) (yuan)

Income	#	%	Cum. %	Income	#	%	Cum. %
0–500	6	0.5	0.5	9,001–9,500	2	0.2	47.1
501–1,000	39	3.3	3.8	9,501–10,000	216	18.2	65.3
1,001–1,500	13	1.1	4.9	10,001–12,500	42	3.5	68.8
1,501–2,000	39	3.3	8.2	12,501–15,000	60	5.1	73.9
2,001–2,500	11	0.9	9.1	15,001–17,500	9	0.8	74.7
2,501–3,000	51	4.3	13.4	17,501–20,000	145	12.2	86.9
3,001–3,500	14	1.2	14.6	20,001–25,000	28	2.4	89.3
3,501–4,000	55	4.6	19.2	25,001–30,000	50	4.2	93.5
4,001–4,500	10	0.8	20.0	30,001–35,000	5	0.4	93.9
4,501–5,000	100	8.4	28.4	35,001–40,000	30	2.5	96.4
5,001–5,500	6	0.5	28.9	40,001–45,000	3	0.3	96.9
5,501–6,000	63	5.3	34.2	45,001–50,000	17	1.4	98.4
6,001–6,500	4	0.3	34.5	50,001–60,000	6	0.5	99.0
6,501–7,000	26	2.2	36.7	60,001–70,000	1	0.0	99.0
7,001–7,500	20	1.7	38.4	70,001–80,000	2	0.2	99.2
7,501–8,000	74	6.3	44.7	100,000+	10	0.8	100.0
8,001–8,500	17	1.4	46.1				
8,501–9,000	10	0.8	46.9	Total	1,184	100.0	

The distribution of reported annual expenditures is shown in Table 5.28 by group. In general, migrants' expenditures were lower than their incomes. They tried to save money to compensate for their long-distance travel and work in a strange city.

Table 5.28. Annual Consumption Distribution of Temporary Migrants in Lhasa (2005) (yuan)

Expenditure	#	%	Cum. %	Expenditure	#	1.0	Cum. %
0–500	37	3.1	3.1	9,001–9,500	12	0.2	78.2
501–1,000	90	7.7	10.8	9,501–10,000	0	0.0	78.2
1,001–1,500	44	3.7	14.5	10,001–12,500	117	9.9	88.2
1,501–2,000	96	8.2	22.7	12,501-15,000	40	3.4	91.6
2,001–2,500	41	3.5	26.2	15,001–17,500	30	2.6	94.1
2,501–3,000	101	8.6	34.8	17,501–20,000	2	0.2	94.3
3,001–3,500	12	1.0	35.8	20,001–25,000	31	2.6	96.9
3,501–4,000	78	6.6	42.4	25,001–30,000	12	1.0	98.0
4,001–4,500	19	1.6	44.0	30,001–35,000	17	1.4	99.4
4,501–5,000	125	10.6	54.7	35,001–40,000	4	0.3	99.7
5,001–5,500	23	2.0	56.6	40,001–45,000	1	0.1	99.8
5,501–6,000	87	7.4	64.0	45,001–50,000	0	0.0	99.8
6,001–6,500	7	0.6	64.6	50,001–60,000	0	0.0	99.8
6,501–7,000	40	3.4	68.0	60,001–70,000	1	0.1	99.9
7,001–7,500	41	3.5	71.5	70,001–80,000	0	0.0	99.9
7,501–8,000	47	4.0	75.5	100,000+	1	0.1	100.0
8,001–8,500	20	1.7	77.2				
8,501–9,000	10	0.8	46.9	Total	1,176	100.0	

Compared with reported incomes and expenditures among individual migrants, more may be known about their savings. From Table 5.29, only 12.9 percent (139 respondents) of the total respondents were in deficit in 2005. Probably these were the newcomers (311 migrants arrived in Lhasa in 2005 in our survey sample) who went to Lhasa in 2005 and needed to pay rent and other investments to start their new jobs in Lhasa. It seems that about 41 percent of the total respondents could save at least 5,000 yuan per year, 25.4 percent at least 10,000 yuan, and 2.9 percent more than 40,000 yuan per year. Knowing that the annual pure income in rural areas of Sichuan and Gansu provinces was around 2,000 yuan, we can see how strong the incentive was for these farmers to move to Lhasa to make money.

Pearson correlations[5] between several key variables are presented in Table 5.30. The major correlation patterns among the temporary migrants in urban Lhasa can be generalized as follows: (1) Males generally are slightly older (.069**), better educated (-.085**) and earn more (-.105**) than females; (2) Han are older (.157**), received more education (-.370**) and earn more (-.116**) than Tibetans; and (3) expenses are closely related to income (489**).

Table 5.29. Comparison of Income and Expenditure of Migrants (2005) (yuan)

Difference	#	%	Cum.%	Difference	#	%	Cum.%
> −3,000	14	1.3	1.3	5,501–6,000	37	3.4	63.9
−2,999 – −2,000	10	0.9	2.2	6,001–6,500	13	1.2	65.1
−1,999 – −1,000	18	1.7	3.9	6,501–7,000	35	3.3	68.4
−999 – −500	26	2.4	6.3	7,001–7,500	6	0.6	68.9
−499 – 0	71	6.6	12.9	7,501–8,000	24	2.2	71.2
1 –500	31	2.9	15.8	8,001–8,500	1	0.1	71.3
501–1,000	34	3.2	19.0	8,501–9,000	24	2.2	73.5
1,001–1,500	38	3.5	22.5	9,001–10,000	12	1.1	74.6
1,501–2,000	81	7.5	30.0	10,001–20,000	57	5.3	79.9
2,001–2,500	30	2.8	32.8	20,001–30,000	147	13.7	93.6
2,501–3,000	88	8.2	41.0	30,001–40,000	38	3.5	97.1
3,001–3,500	19	1.8	42.8	40,001–50,000	26	2.4	99.5
3,501–4,000	69	6.4	49.2	50,001–60,000	3	0.3	99.8
4,001–4,500	16	1.5	50.7	70,001–80,000	1	0.1	99.9
4,501–5,000	89	8.3	59.0	> 80,000	1	0.1	100.0
5,001–5,500	16	1.5	60.5	Total	1,075	100.0	

Table 5.30. Correlations between Variables (2005)

		Ethnicity	Gender	B. Year	Income	Expense	Education
Ethnicity	Pearson Correlation	1	.155**	.157**	-.116**	-.105**	-.370**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	1,455	1,452	1,427	1,175	1,169	1,373
Gender	Pearson Correlation	.155**	1	.069**	-.105**	-.040	-.085**
	Sig. (2-tailed)	.000		.009	.000	.176	.002
	N	1,452	1,463	1,436	1,180	1,172	1,380
Year of birth	Pearson Correlation	.157**	.069**	1	-.076**	-.040	.060*
	Sig. (2-tailed)	.000	.009		.009	.178	.027
	N	1,427	1,436	1,439	1,163	1,154	1,356
Income	Pearson Correlation	-.116**	-.105**	-.076**	1	.489**	.210**
	Sig. (2-tailed)	.000	.000	.009		.000	.000
	N	1,175	1,180	1,163	1,184	1,111	1,116
Expense	Pearson Correlation	-.105**	-.040	-.040	.489**	1	.146**
	Sig. (2-tailed)	.000	.176	.178	.000		.000
	N	1,169	1,172	1,154	1,111	1,176	1,114
Education	Pearson Correlation	-.370**	-.085**	.060*	.210**	.146**	1
	Sig. (2-tailed)	.000	.002	.027	.000	.000	
	N	1,373	1,380	1,356	1,116	1,114	1,385

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

We also analyzed the relationships between annual income and a series of other variables. Table 5.31 shows the results of regression analyses[6] with annual income as the dependent variable, and age, ethnic status, education and occupation in Lhasa as the independent variables. Through regression analysis, ethnic status does not show any significance. Neither do most occupational variables except self-employed businessman.

Table 5.31. Regression Analysis (2005)

Regression*	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	8041.921	1812.847		4.436	.000
Age	132.224	52.440	.075	2.521	.012
Illiterate	-4863.651	1750.423	-.087	-2.779	.006
Primary school	-2554.048	1270.203	-.065	-2.011	.045
High school	9195.573	1509.731	.193	6.091	.000
College	7778.476	2246.325	.106	3.463	.001
Self-employed	5242.554	1591.729	.098	3.294	.001

* Dependent Variable: Annual income.
F = 14.799; Sig. = .000.

The educational variables show the most important impact on migrants' annual income. The final regression equation is as follows:

Income = 8,042 yuan + 132 yuan × Age – 4,863 yuan (if illiterate) – 2,554 yuan (if primary) + 9,195 yuan (if high-school) + 7,778 yuan (if college) + 5,242 yuan (if self-employed);

The regression used a junior middle school education as the reference group for educational background. The regression equation means that, among the respondent migrants, one year in age equates to 132 yuan in his annual income, and those who are illiterate or have only primary school education will earn 4,863 yuan and 2,554 yuan less respectively compared with those having junior middle school education. Migrants with high-school or college education earn 9,195 yuan and 7,778 yuan more. Self-employed migrants in trade or services earn 5,242 yuan more compared with other occupations.

Housing of temporary migrants in Lhasa

Among the respondents, 80 percent lived in housing they rented and 16.6 percent were in accommodation provided by employers, usually in shops, workshops, tents

at construction sites or dormitories shared with other workers. Only 43 respondents (3.2 percent) reported that they had bought housing themselves (Table 5.32) and they seemed to have been in Lhasa for a period of time.

Table 5.32. Housing of Migrants in Lhasa (2005)

	Frequency	Percent	Valid Percent
Bought	43	2.9	3.2
Rent	1,095	74.5	80.2
Provided by employer	226	15.4	16.6
Others	1	.1	.1
Total	1,365	92.9	100.0
Missing	105	7.1	
Total	1,470	100.0	

A large number of migrants lived in small rooms from 10 to 20 square meters in size. About 42.5 percent and 41.5 percent of the respondents reported that their housing had a toilet and a kitchen (Table 5.33). In general, cheap housing rented to temporary migrants was in poor condition despite rent being the largest expense of migrants in Lhasa. Information on housing may indicate that most temporary migrants put up with such poor living conditions because they did not intend to stay in Lhasa for long.

Table 5.33. Housing with a Toilet or Kitchen (2005)

Facilities	Frequency	Percent	Valid Percent
With a toilet	334	22.7	42.5
Without a toilet	452	30.7	57.5
Total	786	53.5	100.0
Missing	684	46.5	
Total	1,470	100.0	
With a kitchen	319	21.7	41.5
Without a kitchen	449	30.5	58.5
Total	768	52.2	100.0
Missing	702	47.8	
Total	1,470	100.0	

Ethnic relations among temporary migrants

The survey asked respondents about their relationships with members of other ethnic groups. Because this is a very sensitive issue, we realize that some respondents may

not have expressed their true feelings. But at least the information gathered can be used as a relative indicator of ethnic relations, or a reference in this regard.

Table 5.34 shows that among Han respondents, 51.2 percent reported that their relationship with minorities was good, 40.6 percent okay, and 8.2 percent bad. Among Tibetans who answered the question, only 6.5 percent claimed their relationship with other groups was bad. Therefore, although there were some problems in ethnic interaction in urban Lhasa, responses to our questions suggested that the majority of temporary migrants (both Han and Tibetans) felt that ethnic relations were smooth in general. Bear in mind that this observation was based on answers to a one-time survey, and the respondents might not have expressed their true opinions because of the sensitive nature of ethnic relations. What happened on Lhasa's streets in March of 2008 showed that ethnic relations in this city were much more complicated than previous impressions had indicated.

Table 5.34. Ethnic Relations among Temporary Migrants in Lhasa (2005)

Ethnic status of respondent	Relation with other ethnic groups			Total
	Good	Bad	Okay	
Han	457	73	363	893
Hui	113	4	36	153
Tibetan	141	14	59	214
Others	11	0	11	22
Total	722	91	469	1,282

The 2005 Lhasa survey is the first temporary migration survey in the TAR and Lhasa. The results of this survey can provide a general picture of temporary migrants in urban Lhasa: their age and gender structures, where they came from, when they came, what kind of work they engaged in before and after arriving, how much they could earn, how they spent their money, how long they intend to stay, their living conditions in Lhasa and their relationships with other ethnic groups.

Conclusion

The discussion above can be summarized in several points:

1. For geographic, transportation, political and diplomatic reasons, international migration has been very low. International travel and trade increased following new policy in the 1980s but statistical records are few.
2. Inter-provincial migration has also been low. In-migrants exceeded out-migrants before 1981 and the trend reversed after that year. There are great

regional variations in inter-provincial migration and migration within the TAR. Lhasa consisted of half of the total inter-provincial migration. New towns, such as Nying chi, also attracted many migrants and this phenomenon needs additional research.

3. As to migration within the TAR, a large proportion of non-official migrants (actual residence being different from the registered place, according to the census) live in Lhasa, especially those with agricultural registration. Migration within the TAR had two characteristics. One was center-oriented, from peripheral areas to Lhasa; the other east-oriented, from western areas to eastern areas.
4. According to our 1988 survey, 1959 was a year that saw large numbers of migrants and their destination was Lhasa. They went to fill places left by those who had fled to India. The rural-urban (Lhasa) migrants were farmers from villages who abandoned agriculture after arriving in the city. In contrast, most rural-rural migrants continued to be farmers.

As the first sampling migration survey in the TAR, the 1988 survey only collected limited basic information on migration. Based on the data from this survey some primary analyses have been introduced in this chapter to draw a rough picture of rural and urban migration in Tibet in the late 1980s. The 2005 migration survey indicates recent dynamics of migration patterns in Lhasa. The number of temporary migrants in the TAR is expected to grow, partly due to the large number of rural Tibetans who will join the migration flow gradually, and partly due to the completion of the Qinghai-Tibet railway, which will provide more convenient transportation linking Lhasa with other cities in nearby provinces. This survey therefore provides baseline data for future studies of migration and urbanization in Tibet.

Migration is a weatherglass of changes in society. Historically, war, famine, ethnic conflicts, pestilence and other disasters, often resulted in large-scale migration. Industrial revolution, discovery of new lands, urbanization, etc. are all related to migration. In China today, a fundamental reform of the social system, basic adjustment of industrial and occupational structures, new geographic adjustment of economic patterns, are all associated with labor migration between regions. Therefore, systematic and in-depth studies of migration, its size, type, character and changes over time, will help us to examine the social dynamics enveloping a society. Migration in Tibet has its own characteristics that are connected to its history, traditional culture, economic structures of the past and present, and policies regulating people's movement. Migration should also be studied in combination with other considerations, such as economic changes and social-system changes, which will be discussed in the next chapter.

6

Economic Patterns and Transitions in the Tibetan Autonomous Region

In the past several decades, studies about Tibet have attracted substantial attention. In general, they have concentrated primarily on history, religion and traditional culture, as well as on Han settlement, ethnic relations and human rights (Pye, 1975; Dreyer, 1976; Grunfeld, 1987; Goldstein, 1989a). Tibet's economic situation has received only limited attention, however (Fischer, 2005; Sautman and Dreyer, 2006). The literature on ethnicity shows that conflicts between groups with different economic interests (in term of access to natural resources, trade balance, wealth and power distribution) often generate ethnic conflicts (Glazer and Moynihan, 1975: 8; Smith, 1991: 20). In some cases, religious groups have their own economic interests and actively participate in economic affairs (Weber, 1963: 223). Migration (the number and occupational structure of migrants, timing and formation of migration) between regions where different ethnic groups live is also affected by the economic relationship between the regions (De Jong and Fawcett, 1981). Economic activities (production, trade, consumption, investment and finance) are among the basic activities of human society, and shape survival and personal development. Economics is critical to understanding the dynamics of social change.

The major questions addressed in this chapter are: (a) the primary characteristics of the modern economy of the TAR before and after 1951, the nature of economic relations between the TAR and other regions in the past and present. The effect economic relations had on migration and ethnic relationships in the TAR before 1951; (b) the changes in the TAR's economy in the past five decades, the major characteristics of the current economy in the TAR, the major impact of these changes on migration and Han-Tibetan relations; (c) the role the central government and the Han have played in the TAR's economy since 1959; (d) the reasons for the TAR having two different economic patterns before and after 1959, and the inherent links between the two.

Because Tibetans living outside the TAR[1] have been under the governments of the provinces in which they reside and because they have been integrated into the

provincial economies for centuries to a certain extent, this study will focus solely on the TAR.

The data and information used in this study are mainly from official statistics and census data, as well as from relevant publications in Chinese and English. The survey of literature is not comprehensive because materials and literature in Tibetan and other languages have not been used. People may question the quality of the census or Chinese government statistics, but as the only systematic economic data available, they provide important points of reference.

A Theoretical Framework

The literature on migration and regional development (Goldlust and Richmond, 1974; Shaw, 1975; Todaro, 1985; Hansen et al, 1990) identifies the following economic activities as shown in Figure 6.1 and other factors that might affect ethnic relationships in Tibet.

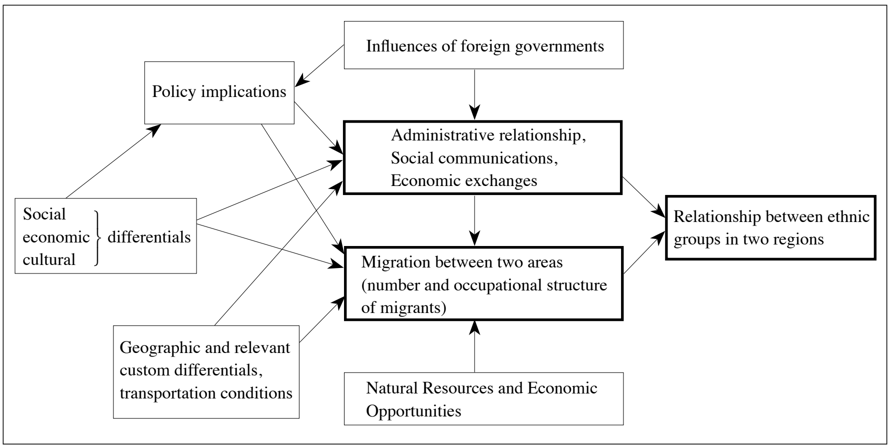


Figure 6.1. The Model for Analyzing Factors Affecting Economic Exchanges and Migration between Ethnic Groups in Two Regions

In this model, differentials in social and economic systems (e.g. land ownership and administrative systems) and cultural aspects (e.g. religion, language) between two regions (Tibet and other areas in China) are assumed to affect the content and extent of administrative and social communications, economic exchanges (aid and trade), and migration (official assignment and transfers, circular or settled merchants, labor migration) between the regions. Large differentials in economic systems may limit trade and migration (Findley, 1977). People usually hesitate to migrate to a

region where the social system, ownership system and language are different from that with which they are accustomed. But if there are strong economic incentives in destination such as higher income or strong political pressure in the place of origin, people may decide to migrate.

Besides having a direct impact, social, economic and cultural differentials between two regions indirectly affect trade and migration through their influence on the attitudes and policies (regulations) of regional authorities toward these activities.

If geographic features (elevation, humidity, landscape, natural resources) and life customs (diet, housing styles) are very different in two regions and transportation conditions between the regions are also adverse, these factors may have a negative impact on communication between regional administrations, and on trade and labor migration between these two regions. Such an impact was found in Inner Mongolia (Ma Rong, 1987). It can be assumed that a similar pattern also exists in Tibet under similar national policies with respect to Tibet, where differences in climate, culture and economy are far greater.

Economic opportunities in one region, which are related to availability of natural resources in rural areas (cultivated land, grassland, forest, mineral resources, water) and jobs in urban areas, directly affect people's motivation to move from other areas into this region, especially in the case of spontaneous migrants. These opportunities for economic gain and social mobility are largely related to characteristics of various social systems (education, employment, promotion, health care facilities, ownership structure). If the resources exist but the in-migrants have no access to them, the opportunities cannot be realized (Abeysekera, 1984). It should also be noted that potential competition between in-migrants and natives affects the attitude of natives toward in-migration.

National policies toward ethnic minority groups and the regions they inhabit have a strong impact on ethnic relations at all levels (national, regional and in the local community). These policies might directly or indirectly regulate social order and people's behavior in language use, school and job recruitment, migration control, income distribution, health care facilities, residential registration, power distribution in local administration, family planning and other activities. These policies might be enforced to reach the national goals in ethnic relations: equity among ethnic groups, or in favor of or against certain groups. Because China has a strong central government and has had a planned economic system for decades, the influence of government policies cannot be ignored.

Policies of foreign governments may directly influence attitudes and the policies of local authorities of one region toward other regions with regard to trade and migration. These phenomena were often observed in countries during periods of colonization. In addition, foreign countries, by their trade with one or two regions, may affect economic exchanges.

Administrative relationships, social communications, and economic exchanges between two regions have a direct impact on migration between the regions. The general relationship between two ethnic groups in separated regions depends on administrative, social, economic relations and the consequences of migration between these two regions.

Migration between regions could change pressure placed on national resources and the job market. If the migration takes place between regions where different ethnic groups are concentrated, it might affect ethnic relations. Selectivity of in-migrants by gender, age, ethnicity, educational background, industrial and occupational status, level of skills, capital, etc. in comparison to the native population and labor force are always sensitive issues. Regardless of whether the in-migration took place in the form of a series of individual and spontaneous moves or by groups that were encouraged or organized by the authorities, it will certainly have an impact on ethnic relations. The volume and geographic distribution of in-migration are also important in examining the impact on native communities.

In his study of the Celts, Michael Hechter (1975: 6–8) proposed two models of national development with respect to the relationship between the majority region (core) and the minority region (periphery) within a country: a diffusion model and an internal colonial model. The first assumes that under the condition of equal rights for all groups, the type of social structure and economic development in the core region will gradually diffuse into the peripheral region. In contrast, the internal colonial model assumes that the core region dominates the peripheries politically and exploits them economically.

This study will examine the variables in the general model of regional economic interactions in Figure 6.1, and discuss the relations between the TAR and other parts of China, referring to Hechter's framework of "core-periphery" relationship.

The Economic Situation in Tibet Prior to 1951

Tibetans have a strong religious tradition (Tibetan Buddhism) that had a significant impact on the political, legal and educational systems, cultural patterns and people's daily lives before 1951. After the signing of the 17-point Agreement and the arrival of the PLA, 1951 became a significant line of demarcation in Tibet's history. Following the flight of the Dalai Lama to India in 1959, the prevailing economic and political patterns (the serf system and the theocratic government) were abolished with profound implications for the economy and society.

In order to understand the economic patterns in the TAR, it is necessary to examine the basic aspects of its economy: main economic activities, type of economic organization, productivity, economic relations with other regions, products and income distribution, use of societal wealth and measures to promote economic activities.

Production and trade

Agricultural and pastoral production

For centuries, agriculture and especially animal husbandry were the major economic activities in Tibet. "Agricultural output constituted one-fourth of the total production of Tibet, animal husbandry constituted the remaining three-fourths (Huang Wangun, 1986: 155)." Together they provided food, clothing,[2] raw materials for handicrafts and goods for trade. The Tsangpo River valley (around 3,500 meters, or 11,500 ft, above sea level with an annual average temperature of 4 to 10 degrees Celsius) is the main agricultural area. Most of Tibet's cultivated land is in river valleys. Northern and western parts of Tibet are major pastoral areas with very low population densities. In the north some areas at the highest elevation (above 5,000 meters, or 16,400 ft) are largely uninhabited (Figure 6.2). Generally, Tibet's geographic and climatic conditions impose certain limitations on the development of both agricultural production and population.

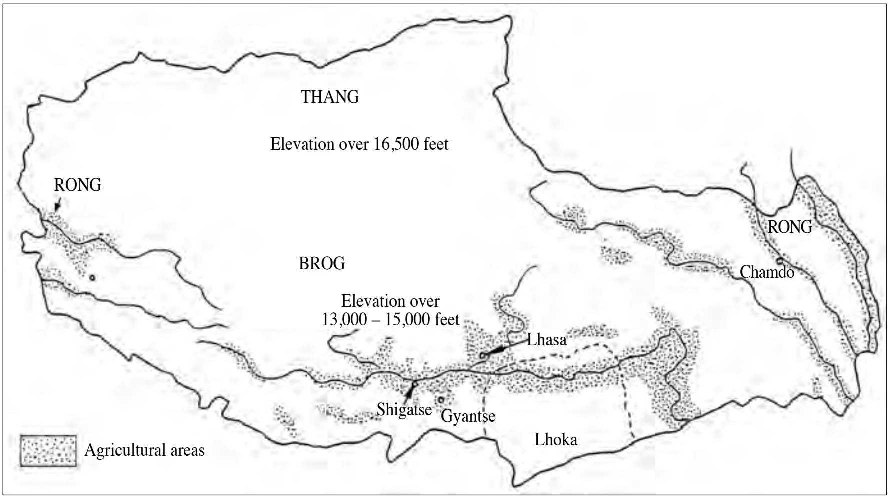


Figure 6.2. Geographic Distribution of Main Agricultural Areas in the TAR

In 1952 there were 2.45 million *mu* of cultivated land in the TAR (1 *mu* = 0.1647 acre) and grain production totaled 155,335 tons (Statistical Bureau of Tibet [SBT], 1989: 211–218). Two major types of grain were produced: barley and peas. The total annual grain production was estimated at around 176,000 tons during the 1940s (Wu Zhongxin, 1953: 85). In the 1940s it was estimated that barley comprised 70 percent of the total grain production, peas 20 percent and the rest 10 percent (Wu

Zhongxin, 1953: 113). Grain production was approximately 135 kg per capita in 1951 (SBT, 1989: 133). It seems that before 1952, grain production in Tibet was generally self-supporting. Rice and wheat imports were very small and mainly for consumption by aristocrats and wealthy Tibetans as well as by merchants who had come from the Han regions. The Tibetan traditional diet consists largely of parched barley mixed with butter tea.

Of the 9.7 million animals in the TAR in 1952, 2.25 million were yaks, 4.7 million sheep and 2.5 million goats (SBT, 1989: 233). Most of these animals were in the pastoral areas of northern and western Tibet. It is difficult to estimate the productivity of animal husbandry before 1952, but trade records reveal that animal husbandry provided most export products.

Transportation and communication

In 1950 Tibet was the only place in the world "where no wheeled vehicles were used" for transportation, "principal rivers were unbridged" and "all transportation was by porters and pack animals" (Karan, 1976: 46). Wheels have been a central element in Tibetan Buddhism and it remains a puzzle why wheels were not used for carts in Tibetan areas. There were rope bridges across the Yarlung Tsangpo River and other major rivers in the region of the present TAR but they were not in function in the late 1940s (Tanzen and Zhang Xiangming, 1991b: 87). There was a small hydroelectric plant in Lhasa built around 1931 that was used to power the mint that produced the Tibetan currency and provided the Potala Palace with intermittent electricity. It was later closed because of management problems and a lack of parts with which to make repairs (Tanzen and Zhang Xiangming, 1991b: 137). A 600-kilowatt hydroelectric power plant was established in Lhasa in 1956 (Karan, 1976: 50). Telephone and government postal services have become available to the public only since the late 1950s (SBT, 1989: 27).

Handicrafts

Modern industrial production did not exist in Tibet before 1951. While the economy and finances of Tibet relied heavily on agriculture and animal husbandry, handicrafts were the main non-agricultural form of production. The statistical yearbook indicates that six percent of the total population was engaged in non-agricultural activities in 1952, but it is not clear how monks were counted in these statistics (SBT, 1989: 133).

Major handicraft products in Tibet included: Pulu (special style Tibetan fabric), Kadian (carpets), tents, wooden bowls, boots, knives, and jewelry (Lhapa Phuntso, 1984: 478). Except for local products such as wool, leather and wood, handicraft production relied on the import of raw materials (cotton cloth, silk, metal, etc.) from nearby Han provinces or India and Nepal.

Trade

Apart from some raw materials for handicraft production, a variety of consumer goods (tea, cotton cloth, china and industrial products) were available only as imports and mainly from other parts of China or India. For centuries, the "tea-horse trade" was the major economic activity between Tibetan areas and the other regions of China (especially Sichuan, Yunnan and Gansu). Sichuan provided Tibet with tea, cotton cloth, silver, sugar and silk. Yunnan was the main area from which Tibetans bought tea and copper (Lu Zijian, 1990). "The imports from China were the most crucial since they consisted of an estimated yearly total of 10 million tons of tea. Other imports from that area included silk, cotton goods, brocades, and satins . . . Exports included wool, yak tails, hides, furs, musk and deer horns (Grunfeld, 1996: 88)."

Han merchants played important roles in Tibet's trade. For centuries, Tibet's major economic exchange had been trade between Tibet and other parts of China. An estimate made by a British consul-general in Chengdu in the early 20th century suggested that trade between Tibet and other parts of China was four times that between Tibet and India. Records show that the value of goods transported from the Han regions to Tibet was 96,771 lb.t. (pound troy, 1 lb.t = 11.94 *liang* = 0.3732 kg.) of silver each year at the beginning of 20th century, and the value of goods from Tibet to the Han regions was 85,887 lb.t. of silver (Huang Wangun, 1982: 50–51). Retingsang was a company owned by regent Reting Rempoche, one of the three largest trading companies in Tibet (Goldstein, 1989a: 331). For decades it and a Han company, Heng-Sheng-Gong (from Yunnan Province), together controlled the tea trade between Sichuan and Tibet, managing to move some 10,000 packages annually (Chen Xunzhou et. al, 1988: 53). There were more than 2,000 Han-owned trade companies and stores in Lhasa in the late Qing Dynasty (Hong Dichen, 1936: 43).

Trade between Tibet, India and Nepal was also important. Tibetan merchants were also very active. They brought various goods from Han areas as well as from India and Nepal. The Yatung customs records[3] indicate that the annual export of wool to India reached 544 tons from 1895 to 1898 (Huang Wangun, 1982: 49). Meanwhile, more than 150 stores in Lhasa were owned by Nepalese in the 1940s (Wu Zhongxin, 1953: 112). The British-Indian government had its trade agencies in Lhasa and Gyantse.

The influence of foreign governments on trade affairs in Tibet was significant before 1952. After the British army, under the command of Francis Younghusband, invaded Lhasa at the beginning of the 20th century, the influence of British India on Tibet greatly increased. Yatung customs records also show a significant growth of trade between India and Tibet. The value of exports from Tibet to India increased from Rs131,548 (rupees) in 1889 to Rs805,338 in 1902, while imports increased

from Rs561,395 in 1896 to Rs962,637 in 1899.[4] The value of imports was generally higher than that of exports (e.g. Rs962,637 import vs. Rs822,760 exports in 1899 (Huang Wangun, 1982: 48). The large increase of Indian goods and influence into Tibet coincided with the increasing weakness of the Qing Dynasty at home and in international affairs. It was at this time that the British initiated negotiations to try to force China to allow further importation of tea from India into Tibet (Dong Zhiyong, 1993: 69–80).

Of the total value (Rs822,760) of exports to India in 1899, pastoral products comprised the major portion: wool (Rs581,944), yak tails (Rs42,628), horses and mules (Rs31,823) and sheep leather (Rs14,183). These items comprised about 81.5 percent of the total value of all exported goods. Musk, about 14 percent of the total, was another major export item (Rs116,024 in 1899) (Huang Wangun, 1982: 49).

After the 1911 revolution, with the encouragement of some foreign governments, the Dalai Lama's government began to agitate for independence. The relationship between Tibet and China's central government deteriorated. Trade between Tibet and other regions in China decreased rapidly. One report estimated that wool exports from Tibet to India were about 1,500 tons while wool to Han provinces amounted to only 500 tons by the 1930s (Chen Xunzhou, et al, 1988: 55). "About 80 percent was exported to India and 20 percent to China . . . and the United States was the largest final purchaser of this wool . . . The Tibetans estimated that these exports amounted to about two to three million U.S. dollars per annum (Goldstein, 1989a: 571–572)." Another book mentioned that wool export to the United States through India "amounted to about three thousand to four thousand tons per year (Grunfeld, 1996: 88)."

Economic and social systems in Tibet before 1952

Agricultural production in Tibet (e.g. using wooden ploughs, threshing by yak tramping) needed to support a population of more than one million, of which more than 10 percent were monks, 20,000 were soldiers from the army (Huang Wangun, 1986: 236) and several hundred were government officials. A much smaller number of Tibetan soldiers, 6,500, was reported to the central government in 1940 (Wu Zhongxin, 1953: 75). Other reports, based on Tibetan sources, indicate that the Tibetan army recruited 15,000 new troops in 1920 (Goldstein, 1989a: 84). The military budget was about 50 percent of the total government income from 1947 to 1950 (Lhapa Phuntso, 1984: 344). For the administration, there were 200 lay officials and 230 monk officials in the Kashag government in the 1930s and 1940s (Grunfeld, 1987: 9). The numbers for monks, solders and officials mentioned here are only estimates because there is no accurate documentation. It is clear that the Tibetan economy developed at a low level and the financial burden was heavy.

The aristocracy and serfdom

Tibetan society before the 1950s was often described as feudal because the ruling group was made up of hereditary aristocratic lords and social groups were bound to estates. "The parallels between Tibet and medieval Europe are striking (Grunfeld, 1996: 9)." "The relationship between Tibetan common peasants and their lords, therefore, in these respects resembled that which obtained in European feudal systems (Kapstein, 2006: 176)."

In general, there was a hierarchical class system in Tibet before 1959. The dominant group consisted of senior monks and aristocrats. This group could further be divided into several subgroups, with the Dalai Lama and members of his family (*yab-gzhis*) at the top, followed by *ger-ba, de-bon, yab-shi, mi-dra* and *Gyu-ma* at different levels in this aristocratic pyramid. There were assumed to be about 350 aristocratic families in total, but only 197 aristocratic families were identified in 1959 (Tsering Yangdzom, 2006a: 26). All were estate owners but with different social status. There is detailed literature about Tibet's aristocracy system (Grunfeld, 1996: 9–12; Goldstein, 1989a: 6–10; Kapstein, 2006: 180–181; Petech, 1973; Tsering Yangdzom, 2006; Tanzen and Zhang Xiangming, 1991a: 84–86).

Serfs (*mi ser*) made up the second group, which also had several subgroups. *Tre-ba* cultivated hereditary "duty land" owned by an aristocratic family or a monastery; they were attached to the land. They worked on the land without payment while providing many other services for their lord and the government. *Du-jung* "had no hereditary land, held hereditary serf status for which they were compelled to pay taxes, perform corvee and other feudal obligations. *Du-jung* had little power and usually rented land or worked as hired hands for taxpayer serfs (*tre-ba*) (Grunfeld, 1996: 13)." *Du-jung* could be divided into four subgroups: (i) those who rented a piece of land from the serf-owner's estates, (ii) those who rented a piece of land from rich *tre-ba*, (iii) those who worked for the serf-owner and paid a "duty tax," and (iv) those who engaged in handicrafts and paid a duty tax. *Du-jun*g paid their tax as individuals, not by household. This, and the differences between land tenure, distinguished the *Du-jung* from the *Tre-ba* (Goldstein, 1971: 65–67). The regular size of estates in terms of households and lands as well as the kinds and amounts of corvee and taxes that serfs had to pay were reported in detail in research based on case studies (Wu Congzhong, 1991: 51–80; Sarat Chandra Das, 1970: 182–182, Labo Phuntso, 1984: 277–282).

The third group, *Nangsan*, was classified as slaves by the Chinese authority and this was also accepted by Western scholars. "Although vehemently denied by apologists for the old order, there is evidence that slaves existed — usually as private household servants (Grunfeld, 1996: 15)." "Slavery exited in the Tibetan world as well . . . mostly took the form of household servitude (Kapstein, 2006: 183)." Their position was hereditary and as a result their children also became *Nangsan* (Tanzen and Zhang Xiangming, 1991a: 86–88).

The fourth group was small, but its members could not be ignored because of their irreplaceable role in Tibetan society and its economy. Very similar to the untouchables in the Indian caste system, this group included "butchers, corpse-disposers, blacksmiths, minstrels, and professional beggars, who lived on the margins of Tibetan society and generally married among themselves. These groups were often considered to be polluted and so in effect were treated as outcasts (Kapstein, 2006: 182)."

Manorial estate system

Literature provides detailed descriptions of the Tibetan estate (Shika) and serf systems. "The two types of economically productive landholdings in Tibet were manorial estates held by lay aristocrats, monasteries, and incarnate lamas, and land directly held by the government. The majority of the country's land and people were organized into manorial estates . . . Tibetan manorial estates consisted of two distinct sections: demesne fields, constituting about one-half to three-fourths of an estate's arable land, from which the lords received the total yield; and the remaining fields, from which the serfs derived their subsistence. The serfs' primary function was to cultivate the lord's demesne fields . . . Serfs were also responsible for such other tasks as repairing the lord's house, transporting his crops and collecting his firewood. They also often had to make some payments in kind. Some serfs, moreover, were selected in childhood for lifetime labor obligations as soldiers, monks, nuns, or house servants." "House serfs (servants) did not have their own land base but were supplied with food and clothes by the lord (Goldstein, 1989a: 3)."

"These estates were extremely lucrative. One former aristocrat noted that a 'small' estate would typically consist of a few thousand sheep, a thousand yaks, an undetermined number of nomads and two hundred agricultural serfs. The yearly output would consist of over 36,000 kg (80,000 lb) of grain, over 1,800 kg (4,000 lb) of wool and almost 500 kg (1,200 lb) of butter (Grunfeld, 1996: 10)." From the above description, we have a rough idea of Tibetan estates.

Three groups of serf-owners (government, nobles and monasteries) owned almost all the cultivated land, most farm animals and serfs. They had acquired their manorial estates through inheritance or as gifts from the Dalai Lama. They hired agents to manage their manors and serfs. Table 6.1 shows land ownership structure in Tibet in 1959 before land reform introduced by Chinese authorities. Self-employed peasants, who owned 0.3 percent of the cultivated land, lived in areas on Tibet's border with Han regions. Other sources provide different estimates. Melvyn Goldstein suggests that religious estates owned 37 percent of the total arable land and aristocratic estates owned 25 percent (Goldstein, 1989a: 3). Others mention a larger percentage. "Monastic estates amounted to almost 40 percent of all productive land in Tibet, while the lay aristocracy was granted only half that

amount, the remainder being placed under the direct authority of the government (Kapstein, 2006: 180)."

Table 6.1. Ownership of Cultivated Land in Tibet (1959)

Land owner	Cultivated land (acre)	Percentage (%)
Government	160,976	38.9
Monasteries	152,286	36.8
Nobles	99,317	24.0
Self-employed	1,241	0.3
Total	413,820	100.0

Source: Lhapa Phuntso, 1984: 253.

Serfs were forbidden to leave the estates to which they belonged. Serfs who escaped were punished seriously. Even top leaders considered escaping a serious crime. In December 1922, the 13th Dalai Lama himself issued an order as follows: "Norbu Drolma and her son, Gonpo Dargye and his wife, Agyel and her two sons, Bale and his wife and son, three members of Garba family, one of Phupa family, the above from Oserchang area of Medro Gongkar have escaped from their estates because they did not pay taxes. Any estate lords, regardless belonging to government, aristocracy, or monasteries, are forbidden to accept them or hide them. They must be sent back upon their capture and this order should not be disobeyed (Lhapa Phuntso, 1984: 265)." Surveys in four estates in Taktse County suggested that there were 44 serfs who had escaped among the total 395 serfs (11 percent) from 1940 to 1950; records show the escape rate in Medro Gongkar County was even higher (45 percent) among serf households from 1949 to 1957 (Lhapa Phuntso, 1984: 354–355).

Population of "classes"

Lhoka prefecture is one of the major agricultural areas in Tibet. The population structure by class before the land reform in 1961 is shown in Table 6.2. Rich serfs who worked on *tre-gang* land provided labor, products and money to estate owners each year. They might have owned their tools and some animals, or even hired other serfs to work for them under the permission of the estate, but they were not allowed to leave the land. Middle serfs could generally support themselves in terms of having sufficient food. Poor serfs here might refer to *bu-jung*, who had no *tre-gang* land. Slaves (*lang-shen*) made up 11.7 percent of the population in Lhoka but were estimated at 5 percent or less in Tibet as a whole, according to other literature (Tanzen and Zhang Xiangming, 1991a: 88; Grunfeld, 1996: 15).

Table 6.2. "Class Structure" of the Population in Lhoka Prefecture, TAR (1961)

"Class"	Household	%	Population	%
Serf-owner	152	0.4	606	0.4
Manager of serf-owner	1,460	4.0	8,611	5.5
Rich serf	1,195	3.3	8,574	5.5
Middle serf	5,413	14.8	34,567	22.1
Poor serf	18,413	50.4	74,271	47.4
Slave*	7,245	19.8	18,251	11.7
Herdsman**	2,327	6.4	10,064	6.4
Handicraftsman	130	0.4	555	0.4
Merchant	113	0.3	438	0.3
Vagrant	104	0.3	510	0.3
Total	36,557	100.0	156,447	100.0

* Many slaves were single.
** Herdsmen were not classified.
Source: Lhapa Phuntso, 1984: 251.

It should be pointed out that the ownership classification that has appeared in Chinese literature since the 1950s was based on Marxist class theory and socialist systems. The Tibetans have their own terms and opinions about their land and social systems. Besides, the *tre-ba* who held land from their lords had a higher social status than *du-jung*, but they also had heavy obligations in corvee labor to their lords, and might have been very poor and hopelessly in debt. The *du-jung* serfs who held no *tre-gang* land or only a little might be richer than some *tre-ba* serfs owing to craft skills. Therefore, the class system measured in terms of wealth is different from the status system measured in terms of land tenure.

Serf-owners and their agents comprised six percent of the population, while self-employed artisans and merchants comprised one percent and herdsmen around 6.4 percent. Population composition suggested by other sources was: nobility (five percent), clergy (15 percent), herdsmen (20 percent) and serfs (60 percent) (Grunfeld, 1987: 13). Some aristocrats were very rich and powerful. For example, the Duoren family owned more than 5,000 acres of cultivated land (Lhapa Phuntso, 1984: 242–245). "On large estates owned by monasteries and noblemen, agriculture had slumped through centuries of neglect and the failure to make permanent improvements of the cropland by the theocratic feudal owners (Karan, 1976: 81)." One characteristic of the system in Tibet was the heavy labor services required from the serfs on behalf of owners. They comprised more than 60 percent of total rent duties, more than 80 percent in central Tibet, before the land reform (Tanzen and Zhang Xiangming, 1991a: 83). The serf system was the major obstacle to agricultural development.

The role of monasteries in the administration and economy

The regime in Tibet before 1952 was a combination of religious institutions and civil administration. Before 1959 the Tibetan *Kashag* "government was administrated by lay and monk officials. Lay officials were normally recruited from the estate-holding, hereditary, lay aristocracy . . . Most commonly, monk officials were either the sons of the Lhasa middle class or members of the families of existing monk officials (Goldstein, 1989a: 6, 8)." Religious organizations led by senior monks controlled the whole society. Not only was the Dalai Lama the ultimate ruler of Tibet, combining religious and political authority in his person, but the position of *Lonchen* (prime minister) was officially restricted to a monk *shape* (Tibetan term for "cabinet members") among the four *shapes* in *Kashag*. The chief officials at *chigyab* (region) and *dzong* (county) level also consisted of both monk officials and lay officials (Tanzen and Zhang Xiangming, 1991a: 105–107).

The domination of monasteries, to a certain extent, was due to the huge monk population. In 1737 there were 316,231 monks (about 35 percent of the total population) and in 1958 there were 114,103 monks (about 10 percent of the total population) (Liu Rui, 1988: 35,298). "Surveys showed that there were 97,528 monks in Central Tibet and *Kham* in 1694, and 319,270 monks in 1733. Assuming a population in these areas in 1733 of about 2.5 million, about 13 percent of the total population and about 26 percent of the males were monks (Goldstein, 1989a: 21)." The highest proportion was found during the reigns of emperors Yongzheng and Qianlong of the Qing Dynasty, when monks reached one-third of the total population (Liu Rui, 1988: 55).

A study reported that this number of monks only included those of the *Gelugpa* sect, and the total number of monks was about one half of the total population (Wang Sen, 1984: 193). Another estimate suggests that there were 0.76 million male monks in Tibet in 1800 affiliated with 2,500 monasteries (Sarat Chandra Das, 1905: 106). The Dalai Lama claimed 250,000 monks in Tibet in the 1950s (*Le Figaro*, Oct.5, 1982). The large population of well-organized monks and nuns was the most important part of Tibetan society.

Large monasteries had their own military forces and had often been involved in power struggles (Lhapa Phuntso, 1984: 309). Among the monks of "three seats" monasteries (Drepung, Sera and Ganden, the traditional leading monasteries in Tibetan Buddhism), 10 to 15 percent were *dibdos* ("fighting soldiers"). "These monks had a distinctive appearance (style of hair, manner of tying their robes) and belonged to clubs that held regular athletic competitions. They also typically engaged in ritualized combat with weapons according to a code of chivalry, and often acted as bodyguards for the monasteries." "The presence of 20,000 monks in and around Lhasa, thousands of whom were this-worldly, aggressive, fighting monks, traditionally afforded the three monasteries tremendous coercive leverage vis-à-

vis the government, whose army in the pre-1913 period they dwarfed (Goldstein, 1989a: 25–26)."

Tibetan civilization, including its philosophy, art, medicine, astronomy and literature, rested on Tibetan Buddhism. Apart from Buddhist sutra learning in monasteries, there were only two formal schools to train lay and monk officials in Lhasa (Grunfeld, 1996: 17). There were also several traditional private schools in Lhasa, mainly for aristocrats' children (Goldstein, 1989a: 7). The three famous monasteries around Lhasa had a total of 998 smaller monasteries under their supervision; these monasteries organized a parallel religious system to the lay administration.

Income of monasteries

Monasteries also wielded economic power. Of the total cultivated land (three million Tibetan *khe*) (one *khe* is about one *mu* or 0.1647 acre),[5] 39.5 percent was owned by either monasteries or senior monks individually (Tanzen and Zhang Xiangming, 1991a: 88). In 1959 the three monasteries owned 18,435 acres of cultivated land, 110,000 animals, and 40,000 serfs (Lhapa Phuntso, 1984: 243–244). For example, "Drepung monastery was reputed to have 185 estates (about 51,000 *khe* cultivated land), 20,000 serfs, 300 pastures (and over 30,000 animals), and 16,000 nomads (Goldstein, 1989a: 34; Wu Congzhong, 1991: 55)." Monasteries owned enormous estates, serfs, pastures and handicraft workshops, and also engaged in trade and loan businesses. Some suggested that large monasteries had their own organizations (*lab-rang*) that engaged in trade (Bell, 1928: 125). Others think *lab-rang* were the corporate organizations of incarnate lamas and separated from the property owned by monasteries.

The interest from regular loans and usurious loans was one of the major income sources for monasteries. According to an incomplete record, the Dalai Lama's loan office extended loans of 254,488 lb.t. silver in 1950 and collected interest of 27,961 lb.t. silver. The annual income from loans in Drepung monastery included more than 80,000 tons of grain and more than 100 million silver coins in 1952; the interest from these loans comprised 25 percent of its total income (Kuang Haolin, 1990: 145). The lowest interest rate was the barley loan offered by the government, about 10 percent (borrowing 10 *khe* in spring and returning 11 *khe* by the end of year). The barley loan offered by aristocrats to their *tre-ba* usually had much higher interest rates, around 14 percent to 25 percent (*dungye*: borrowing seven *khe*, returning eight *khe*; *shinga*: borrowing four *khe* and returning five *khe*). Because the interest rates of government loans were usually lower, it was common for aristocrats to borrow grains from the government first, then to loan the grain to their *tre-ba* (Wu Congzhong, 1991: 71). Other literature suggests the general interest rate for currency (Tibetan silver coin) loans from monasteries was about 30 percent, and for currency loans from nobles about 20 percent. The interest earned

comprised 25 to 30 percent of the total income of the "three seats" monasteries and about 11.5 percent of the total income of the local government (Lhapa Phuntso, 1984: 284–285).

Although monasteries were very rich, they provided only limited supplies to ordinary monks (Goldstein, 1989a: 34–35). Monasteries and monks received large sums of money and goods from pilgrims and many monks actually lived on these donations. Most of the pilgrims were serfs and herdsmen. Records show that in the 1950s the Drepung Monastery's annual income from pilgrims included: 25,963 lb.t. silver, 13.75 tons of barley and 106.25 tons of butter (Huang Wangun, 1984: 12). After their taxes and contributions to the serf-owners, government and monasteries, some poor serfs and herdsmen might have had limited resources left for survival. That was the main reason some serfs escaped from the estates to which they belonged.

Income of the government

Several records mention the income of the Tibetan government. A document sent to the Qing emperor in 1795 reported that "the Tibetan government in the Potala Palace had, besides non-monetary goods (barley, animals, butter, etc.), an annual cash income around 127,000 *liang* silver (10,637 lb.t.). But their expenses of 143,600 *liang* exceeded this income: 79,000 *liang* was for religious ceremonies in January and February, 39,200 *liang* for monthly religious rituals and 24,400 *liang* to buy grain, medicine and other necessities for the monks. The shortage has been subsidized by the Qing government (Wu Zhongxin, 1953: 85)." The income and expenses of the Tashilhunpo monastery under the Panchen Lama had a similar ratio: 66,900 *liang* silver income vs. 74,600 *liang* expenses (Zhang Yuxin, 1983: 35).

Sir Charles Bell reported on the financial records of the Tibetan government in 1917. The Lhasa civil government had an income of £720,000 (in British currency) in that year while the church (Potala Palace) had an income of £800,000. The government gave the church an additional £274,000 from its own funds (Bell, 1946: 165–166). Probably it means that *Kashag* collected its income as taxes from government estates, taxes from aristocratic estates, loan interests, trade customs and other sources. In the 1940s the annual income of the Tibet government included: barley (750 tons), butter (363 tons), tea (183 tons), and cash (seven million *liang* silver) (Wu Zhongxin, 1953: 86).

The Potala collected income from its estates, loan interests, donations from pilgrims and other sources. The *Kashag* and Potala had different channels of income and different budgets, but both were under the same leadership of the Dalai Lama. Another study reported that 50 to 60 percent of the annual income of local governments at the *dzong* (county) level also was used to support the monasteries' religious rituals each year (Zhou Benjia, 1985: 43). Therefore, the Potala and the monasteries were the main wealth collectors through direct taxes from their estates

and contributions from the government and pilgrims, as well as interest from their own loans and trade activities. It should be noticed that a certain proportion of donations to religious rituals went to participating monks as *vgyed*. It is safe to say that most of the wealth in Tibet was used to support religious groups and activities.

Major characteristics of Tibet's economy before 1951

Generally, the characteristics of Tibet's economy before 1951 can be summarized as follows:

1. The Tibetan agricultural economy relied on manpower, animal power and traditional tools. Generally, there was no modern industry, transportation or electricity and no application of modern science and technology in production and consumption. Handicrafts and trade remained at a rudimentary level (small workshops, street peddlers, and transportation by porters and yaks) and there was a very low level of urbanization.
2. Both agricultural and pastoral production in valley areas with a relatively high population density was controlled by the monasteries, the government and aristocracy who practiced an estate-serf system with some variations. There was looser control of herdsmen who lived in remote pastoral areas.
3. Tibet was an economically self-supporting agricultural society exporting wool and other pastoral products in order to import tea, cotton cloth, gold, metal and other necessities for daily consumption and handicraft production.
4. Religious groups (or more precisely, senior monks on behalf of the monasteries) were very powerful. In the early 1950s monks comprised more than 10 percent of the total population of Tibet, and a large proportion of the population around the main cities were monks in monasteries. Religious groups led the government and controlled the economy, and owned more than one-third of the cultivated land, many pastures and a large number of serfs and slaves.

Examining the use of societal wealth in Tibet may also be helpful in understanding the nature of Tibet's economy and the purposes of production. In Tibet, except for a small proportion of products used for the subsistence of serfs and herdsmen, most societal wealth was put to the following uses:

1. Costly religious rituals. In the 18th century expenses for the January and February rituals in Lhasa were about 62 percent of the total annual income of the *Kashag* government (Wu Zhongxin, 1953: 85). In the 1950s the January ritual in Lhasa cost about 0.62 million yuan each year (Kuang, 1990: 146). There were 2,711 monasteries in 1958 (Liu Rui, 1988: 298). A report to the Qing emperor in 1737 mentioned that there were 3,477 monasteries in Tibet at that time (Zhang Yuxin, 1983: 34). There were millions of butter lamps burning day and night in thousands of monasteries.

2. Supporting the monasteries and religious rituals was a heavy burden in Tibetan society. Monks made up 10 percent of the total population in the early 1950s. If one household was assumed to have 4.5 members on average and monks were assumed not to be productive, then it might be estimated that two households supported one monk (Liu Rui, 1988: 298). More than half of the income of the Tibetan government also went to the monasteries for religious rituals.
3. A large amount of gold and silver collected by the monasteries was melted to make religious statues. Towers containing the corpses of senior incarnated monks were decorated with significant amounts of gold, gems, pearls and other valuable materials. Following this tradition, the central government of China recently provided more than 600 kg of gold and more than 500 kg of silver to decorate the tower of the 10th Panchen Lama, and another 64 million yuan to build a 33-meter-high temple for this tower (*Chinese Tibet*, spring issue, 1990). Huge sums were also used to build and maintain the thousands of monasteries, some of which were very large; e.g. Drepung monastery had 10,000 monks in 1951 (Goldstein, 1989a: 25).
4. The Tibetan government and its army also needed support. Because more than half of the government officials were monks and lay officials who derived their income mainly from their hereditary estates, the administrative budget in Tibet was relatively small. While half of the government's income went to monasteries for religious rituals, the other half was used to support its army.

"Most of the government's income was earmarked not for government activities but, rather, for religious ceremonies (Goldstein, 1989a: 85)." The role of religion in the economy and people's lives was essential. Land in Tibet was owned mainly by monasteries, which largely also controlled production. Yields were used for the consumption of monasteries and rituals, and these together created a pattern which could be called a "monastery economy." This "monastery economy," the theocratic political regime, and the estate-serf system were bound up closely with each other, forming a "trinity" social structure in Tibet with the religious groups as its core.

Generally, Tibetan society before 1951 can be compared with the European Middle Ages. In both, "the great religions prospered and overwhelmed the masses. Hierarchies in both the organized Christian Church in Europe and Lamaist monasteries in Tibet played a major role in society and in the government of the two areas. The Middle Ages in Europe were followed by the Renaissance . . . In Tibet, no comparable renaissance occurred. The hierarchies of the Gelugpa sect, the Dalai Lamas, continued to maintain a monastic monarchical state from 1578 until . . . 1951 (Karan, 1976: 12)." The nature of the Tibetan system was a "combination of religious organization and administration." The Dalai Lama was the top religious leader as well as the supreme dominator (Buddha King) and senior monks played important roles at all administrative levels. It is safe to say that religious leadership in

Tibet controlled the administration, and through administration strongly influenced the judiciary and social policies. The monasteries collected money directly from their estates and accepted donations from the entire population and had their own military forces. The civil aristocratic system was interwoven systematically with the religious leadership. Senior monks and monk officers were mainly from aristocratic families. The *Gelugpa* sect in Tibet sustained all the major characteristics of the Christian church of the Middle Ages since "it also made them advocates of the serf-estate economic system and, thus, extremely conservative. As Tibet attempted to adapt to the rapid changes of the 20th century, religion and the monasteries played a major role in thwarting progress (Goldstein, 1989a: 37)."

The relationship between Tibet and other provinces before 1951

Administrative, social and economic relationships between Tibet and other provinces were maintained within this historical context. The geographic features and poor transportation conditions made social, economic and cultural exchanges between Tibet and other areas very difficult. The dominant landlord-tenant system in other regions of China differed in essential ways from serfdom. Tibetan serfs were bound to their estates. *Tre-ba* had a large variety of duties (Lhapa Phuntso, 1984: 274–282). *Du-jung* were not assigned land from estates but they still needed to pay various taxes (e.g. transportation corvee). "The Tibetan serf system also had a category of landless serfs who could live and work away from their estate, although they were still tied to their lord, to whom they paid an annual fee called *mibo* ('human lease') (Goldstein, 1989a: 5)."

In comparison, Han farmers were legally free. They might have been very poor and have to pay a high rent for the land they rented from their landlord. They might have lived in dismal conditions. But if they did not rent land from the landlords, they did not need to pay anything to these landlords and were free to leave. This was the significant difference between the Tibetan serf-estate system and the tenure systems in Han regions. No Han farmer wanted to move to Tibet and turn himself into a serf; no such records have been found in literature. The difference in system was a key factor in keeping Han agricultural in-migrants out of Tibetan areas and maintaining a high degree of ethnic homogeneity in Tibet.

There was a multi-religion system in other regions of China: Taoism, Islam, Mahayana Buddhism,[6] Christianity, Protestantism, and other indigenous religious groups had lived together peacefully. All these religious groups had only a limited influence on the administration of the Chinese state. In history, Taoism and Mahayana Buddhism had strong influences on individual emperors who wished to live a longer life by elixir. But these religious groups and their leaders never dominated imperial administration. This was very different from the situation in Tibet, where

the *Gelugpa* sect led a trinity social structure and controlled administration. The differentials with regard to geographic conditions, land ownership, social systems and the role of religion had largely restricted the economic and personnel exchanges between Tibet and other regions of China.

The main goal of the Qing Dynasty with respect to Tibet was to maintain the subordination of Tibet, keep Tibet peaceful and defend Tibet from foreign invasions. That was the mission of its two commissioners (*Ambans*) and troops in Lhasa. There were 3,000 soldiers (Han, Mongol, and Manchu) in Lhasa in the early 18th century, although at times they reached 10,000 to 15,000 during the war against the Gurkhas (Grunfeld, 1996: 45–46) in 1791 . "There can be no question regarding the subordination of Tibet to Manchu-ruled China following the chaotic era of the 6th and 7th Dalai Lamas in the first decades of the 18th century (Goldstein, 1989a: 44)."

The main official economic relationship between the imperial government and the Dalai Lama's government was described as "tribute and reward (Huang Wangun, 1988: 13)." This was a system in which the Tibetans presented tributes to the emperor of China and in return received more lavish gifts (rewards) such as large quantities of tea. In addition, the trade taxes collected in western Sichuan (*Tachielu*) were also awarded to the Dalai Lama each year during the Qing Dynasty (Zhang Yuxin, 1983: 32). A document signed by the Qianlong emperor announced that the empire will "exempt Tibetans from imperial taxes" and "all the taxes and fines collected by the local government in Tibet should be used for religious rituals and local administration (Zhang Yuxin, 1983: 32–35)."

The commissioners in Lhasa were also responsible for arranging trade between Tibet and other regions. Such trade had often been regulated through the administrative system. For example, during the Qianlong reign (A.D.1736–1795), the Tibetan government bought copper from Yunnan Province three times through Chinese commissioners in Lhasa. When the Yunnan governor (Li Sirao) refused to provide copper to Tibet in 1779, the Dalai Lama complained through the commissioners, and Qianlong formally rebuked this governor (Chen Xunzhou, et. al, 1988: 54).

Tibet's major trade partners were Han provinces. "Tibetan civilization and culture of the present day are largely due both to China and India; to the latter for the religious side, to the former in the main for the material side (Bell, 1928: 12)." Even though relations between Tibet and the central government deteriorated after the 1911 revolution, trade continued. For example, from 1929 to 1938, the tea sold and transported into Tibet from a single county (Fohai) in Yunnan was about 634 tons each year (Tan Fangzi, 1940).

From 1911 to 1951, the Tibetans who lived outside the present TAR (in Qinghai, Gansu, Sichuan etc., about one half the total Tibetan population in China) were still under the administration of these respective provinces while the *Kashag* severed the

relationship with the central government. Their economic activities were integrated into their local economies and their relationship with the Dalai Lama was mainly religious.

The influence of Tibetan culture on other parts of China was limited. There were hundreds of Tibetan monks in monasteries in Beijing and Chengde but pilgrims mainly came from Inner Mongolia and Manchuria. These monks were respected by the Qing officials and Tibetan Buddhism deeply influenced the Mongols, but it had a limited impact on the religious beliefs of the majority Han.

The Han and other ethnic groups (e.g. Manchu, Hui)[7] who lived in Tibet prior to 1951 can be classified into four groups: officials and troops sent by the central government (about 2,000 between 1727 and 1911; a few officials returned to Lhasa in the 1930s); merchants in cities and towns, handicraftsmen and gardeners[8]; and monks who went to study in Tibetan monasteries. These people were a very small percentage of the population in Tibet, but they maintained administrative, social, economic and cultural relations between Tibet and other parts of China. After the Kuomintang government's failure in the civil war in 1949, the *Kashag* government expelled most Han officials from Lhasa.

The relationship between Tibet and other regions of China before 1951 seems to fit the first stage of the diffusion model quite well. "The core and periphery regions exist in virtual isolation from one another. Events in the core have but slight influence in the periphery . . . and there are many significant differences in their economic, cultural, and political institutions (Hechter, 1975: 7)."

Major Changes in the TAR's Economy since 1959

The Communist Party won the civil war in 1949. After a battle in Chamdo, the 17-Point Agreement was signed by the central government and the *Kashag* government in 1951. The Dalai Lama agreed to carry out social reforms in the future and to help PLA troops enter Tibet, and the central government agreed not to change the social and economic systems (serfdom and estates) by force. The Chinese central government then became a key factor in Tibet once again.

From 1952 to 1959 the basic situation in Tibetan areas administrated by the *Kashag* government did not change much. However, some social and economic changes associated with land reform and collectivization took place in Qinghai and the Chamdo District in 1956 and 1957. Chamdo had been under the direct control of the central government since 1950. One consequence of the changes was that the value of industrial production by factories in Chamdo reached 1.7 million yuan in 1956 and 53.3 million yuan in 1959 (SBT, 1989: 84). After the Dalai Lama and his followers fled to India in 1959 significant social and economic changes in the TAR took place and the TAR was formally established in 1965.

Reform of the social and economic systems

In the past 50 years Tibet (and China as a whole) has gone through a series of changes in economic and administrative structures. In 1959 serfdom was abolished and the monasteries lost their influence on administration. From 1959 to 1961 all serfs and slaves were liberated and land and animals were distributed among former serfs, herdsmen and slaves. The process of this social reform has been described by some western scholars in detail at village level (Goldstein, 1989b). In the 10 years to 1975 the commune system was gradually established in most rural areas in the TAR (Lhapa Phuntso, 1984: 455–459). In the 1980s the household responsibility system was introduced to the TAR. Land and animals were redistributed among peasants and herdsmen. Since 1984 the policy in agricultural areas has been "land use under household management." The policy in pastoral areas is: "animals belong to households as private property, managed by themselves (Tanzen and Zhang Xiangming, 1991a: 413)."

Peasant households received an equal share of arable lands in their community according to the size of the household. They managed their productive activities themselves and all harvests belonged to this household. They signed contracts with the government and community for a period of time. They were not allowed to sell the land but could rent it to others for one to three years. The methods of redistribution of lands, pastures, trees, wells and other natural resources and the length of period in "contract" (usually 10 to 20 years) in rural areas largely depended on the community (administrative village); and the members of the community voted to decide the methods. The situation in the TAR can be compared with rural reform in Inner Mongolia (Ma Rong, 1996b: 547).

Since 1959 administrative networks (government, social organizations, party organizations, urban neighborhood committees, etc.), as well as other organizations (education, health care, welfare, resident registration, public security, etc.), have been established in the TAR to mirror those in the rest of China. Thereafter the social and economic systems in the TAR were fully incorporated in China and have been influenced by all the policy changes made by the central government.

As with other ethnic groups, Tibetans suffered extreme repression during the Cultural Revolution. From 1966 to 1967, during the early years of the Cultural Revolution, all government officers including Han and Tibetans as well as religious leaders (including the 10th Penchan Lama) were criticized by the Red Guards, and were officially in prison or unofficially held by various revolutionary organizations. Religious and traditional cultures in China were criticized as "the Four Olds" (old ideas, old culture, old customs, old habits) and Chairman Mao was called to demolish them. Some Red Guards went to the TAR and tried to stimulate the Revolution. In August and October of 1966, Premier Zhou Enlai issued two documents to order them to leave the TAR but his orders were not heeded because the Red Guards were

supported by his political foes. The following internecine struggles among various revolutionary organizations and their competition to break down the Four Olds in the TAR caused much damage to monasteries and to traditional cultural heritage (Grenfeld, 1996:183–186).

During the Cultural Revolution, industrial production and other economic activities in the TAR and other parts of China were seriously curbed and even halted. The situation started to change when the Gang of Four was arrested in 1976, soon after Chairman Mao's death.

When Deng Xiaoping returned to power in 1978, the situation started to change and China entered a new era of "system reform and opening up." During the reform era, when communes disintegrated and private business became legal and even encouraged in the early 1980s, Tibetans, like other groups, benefited from the new policies (Goldstein and Beall, 1990).

The contemporary reform period is similar to the second stage of the diffusion model. But the changes were not spontaneous; instead, they were planned and strongly enforced by the central government. By enforcing the same administrative establishment and development programs (education, health care, infrastructure and, most importantly, industrial production), the social and economic structures of the core (Han regions) have expanded into the peripheral region (the TAR). The contacts and exchanges between the core and periphery in political, economic and cultural aspects have greatly increased.

The role of monasteries in the TAR after 1959

In 1959 many monks went into exile in India with the Dalai Lama.[9] The number of monks and monasteries in Tibet then fell significantly: there were 114,103 monks and 2,711 monasteries in 1958, but only 18,104 monks and 370 monasteries in 1960. In 1976, after the Cultural Revolution, there were only 800 monks and eight monasteries left (Liu Rui, 1988: 298).

The situation began to change after 1980. The government has re-emphasized religious freedom and tried to repair the damage done to religious groups during the Cultural Revolution. After many monasteries were rebuilt, the number of monks increased rapidly. The numbers of monks and monasteries in Tibetan areas increased to 6,466 and 234 respectively by 1986. Between 1980 and 1994, 1,400 monasteries were rebuilt or repaired by the central and local governments in the TAR for a total cost of 2,600 million yuan (*Tibetan Youth*, January 7, 1995).

"A 2000 count gave 46,000 monks and lamas, which is about 1.8 percent for the TAR's population or about 3.6 percent of its males, and some 1,700 places for religion, temples and monasteries (Mackerras, 2003: 123)." Another report provided detailed numbers of monasteries and monks. In 1994 there were 3,300

Tibetan Buddhist monasteries open to the public in China, and the total number of Tibetan Buddhist monks and nuns had reached about 120,000 (in Sichuan 41,800, TAR 41,800, Qinghai 21,000, Gansu 5,500, Yunnan 1,400) (Lin Junhua, 1995: 17). Religion once again is exerting considerable influence in Tibetan society, even among Tibetan cadres and intellectuals (MacInnis, 1989: 187). Accompanying the recent increase in number of monks, monasteries have sought a restoration of their former religious and civil power.

The income of peasants and herdsmen has increased in the past two decades. The per-capita income (after covering all production costs) was 119 yuan in 1978 in rural areas of the TAR. It increased to 582 yuan in 1990 and 3,176 yuan in 2008, increasing 26.6 times in 30 years (SBT, 2009: 345). Because of the income growth Tibetan peasants and herdsmen are now extending more donations to monasteries and monks. A study in 1988 reported that in Lhasa's monasteries the average annual income obtained from donations was 1,000 to 1,300 yuan per monk. This was three times the incomes of peasants and herders at the time. The central government and the TAR government also provide funds to important monasteries to maintain and repair their buildings and to support religious rituals.

Transportation and production

Since 1959, the economy and landscape in Tibet have changed in many respects. First, an effective road network has been established (1,988 km in 1954, 51,314 km in 2008). There were 81,773 buses/cars, 46,208 trucks, and 12,084 tractors in the TAR in 2008 (SBT, 2009: 217, 151). Second, the total power of agricultural machinery per capita in the TAR is now close to that at the national level. It reached 3,496,404 *kw* in 2008, about 1.25 *kw* per capita. Third, chemical fertilizer and other techniques for improving production are commonly used in rural areas in the TAR (16.6 kg chemical fertilizer per capita in 2008) (SBT, 2009: 153). With improved transportation conditions, introduction of machinery and new technology, the value of agricultural production in the TAR increased from 144.17 million yuan in 1959 to 8845.18 million yuan in 2008, increasing about 61 times in the past four decades.

The increases in the main items in both agricultural and industrial production are shown in Table 6.3. Cultivated land increased from 163,330 hectares in 1952 to 230,800 hectares in 2000, and then started to decrease. It suggests that land resources became limited and urbanization took some land from agriculture. Grain production increased from 1,200 kg/hectare in 1952 to 5,570 kg/hectare in 2008 (SBT, 2009: 158), or 135 kg per capita in 1952 vs. 340 kg per capita in 2008. Meanwhile, the number of animals increased from 9.74 million in 1952 to 24.05 million in 2008, about nine animals per capita (SBT, 2009: 162). The speed of agricultural and industrial production was faster than that of population growth until

2000. But compared with other parts of China, the speed of agriculture in TAR has been relatively slow. Since the 1990s production growth and population growth in the TAR have remained at a similar level, even though there is a trend of population growth exceeding production growth. During the same time, tourism developed fast and attracted many rural laborers to move to cities. The total income from tourism was 4851.6 million yuan in 2007, close to total industrial production (5,042.8 million yuan). Tourism might play a key role in the TAR's future economy. But the ethnic tension and street riots will certainly have a negative impact on tourism in Tibet. One example was the significant fall in tourist numbers and income after the March 14 riot in Lhasa in 2008. The decrease is due to both the Chinese government's restriction on foreign visitors and the fear among Han visitors that they will become victims of ethnic violence.

Table 6.3. Major Indices of the TAR's Economy (1952–2008)

1990	1952	1959	1965	1970	1975	1980	1985
Population (10,000)	114.1	122.8	137.1	151.2	169.1	185.3	199.5
Cultivated land (1,000 hectares)	163.3	167.6	202.8	218.3	225.7	228.7	223.6
Agri-production (mil *yuan*)	143.1	144.2	264.2	280.3	340.3	532.2	1088.8
Grain production (1,000 tons)	155.3	182.9	290.7	294.9	445.8	505.0	530.7
Live-stock (10,000)	974	956	1701	1919	2117	2351	2179
Ind. production (mil. *yuan*)	-	43.4	23.5	37.3	113.1	148.9	212.5
Chromium ore (1,000 tons)	-	-	-	0.3	0.2	50.3	14.1
Coal (1,000 tons)	-	45.8	19.7	9.4	61.9	29.8	29.8
Lumber (10,000 cubic meters)	-	6	8	7	17	21	21
Knitting wool (tons)	-	-	-	-	353	371	146
Cement (1,000 tons)	-	-	10.6	4.6	34.0	52.2	46.7
Income from tourism (mil. *yuan*)	-	-	-	-	-	1.3	4.0
	1990	**1995**	**2000**	**2002**	**2005**	**2007**	**2008**
Population (10,000)	218.1	235.6	251.2	255.4	267.6	273.6	279.2
Cultivated land (1,000 hectares)	222.5	224.5	230.8	229.9	223.0	228.2	225.9
Agri-production (mil *yuan*)	1950.2	3589.6	5121.9	5588.7	6774.1	7983.1	8845.2
Grain production (1,000 tons)	608.3	719.6	962.2	984.0	933.9	938.6	950.3
Live-stock (10,000)	2251	2379	2266	2439	2415	2407	240.5
Ind. production (mil. *yuan*)	372.0	908.2	1830.4	2163.4	3364.6	5043.8	5971.5
Chromium ore (1,000 tons)	93.1	109.9	196.6	124.2	116.7	128.6	101.7
Coal (1,000 tons)	9.0	-	-	-	-	-	-
Lumber (10,000 cubic meters)	13.1	14.1	13.4	-	24.9	35.7	32.7
Knitting wool (tons)	72	89	30	17	2	39	9
Cement (1,000 tons)	132.3	220.0	493.2	590.8	1372.8	1596.6	1685.0
Income from tourism (mil. *yuan*)	6.8	213.8	674.6	987.8	1935.2	4851.6	2258.7

Sources: Lhapa Phuntso, 1984: 63, 84, 218, and 233; SBT, 1994: 41–43; 1999: 210; 2009: 15, 140, 149, 161, 162, 196, 238.

Many factories have been established in the TAR since 1959, but the development of industry has had a tortuous history. The government simply tried to follow the industrial structure and development plans of other regions, ignoring the actual situation in the TAR (scarcity of fuel, high costs of transportation, inexperienced local laborers, etc.). There was no modern industry or infrastructure before the 1950s and people's life-styles and work customs were much different to those in industrial societies. Many factories established in the TAR rapidly acquired a financial deficit and became a burden on the government. So, the value of industrial production of state-owned enterprises first increased to 141.7 million yuan in 1960, and then decreased to 11.2 million yuan in 1968.

In the 2000s people discussed the development model of Bhutan, which also has a Tibetan Buddhist religious tradition and has developed its economy in similar ways to Tibet. Bhutan protects its environment and tourism has become an important part of its national economy. Its process of democracy has moved forward under the influence of its king. Although Bhutan is relatively smaller (with a population around 2.1 million, a territory of 45,000 sq. km, and US$ 1969 GDP per capita in 2002, UNDP, 2004: 141, 154) than Tibet, it might provide another model of social, cultural and economic development in the Himalaya region.

After some adjustments, the value of industrial production increased again in the late 1980s. The ownership structure of industrial enterprises in the TAR also experienced a great change, as in other parts of China. Among the total 5,044 million yuan "gross output value of industry" in 2007, 33.1 percent was produced by state-owned enterprises, 5.6 percent by collective-owned, and 61.3 percent by "others" (private, joint venture and foreign companies) (SBT, 2008: 169). Therefore, the major industrial production growth was due to private enterprises.

One problem accompanying the development of industry in the 1980s was the increasing deficit. In 1985 a one yuan investment in industry in the TAR resulted in a 0.45 yuan deficit. Only after 1989 was the cost-profit balance for "enterprise income" sometimes positive. For example, the total gain of state-owned enterprises was 76.7 million yuan in 1994 (including 9.98 million yuan profit and 66.72 million yuan tax), but the subsidies to state-owned enterprises in the TAR government budget was 165 million yuan in the same year (SBT, 1995: 105–106). That was why large capital flows from the TAR went to coastal provinces. These more developed regions need capital and try to borrow money from banks in the TAR (Wang Xiaoqiang and Bai Nanfeng, 1986: 111).

This situation is improving. Government subsidies to state-owned enterprises fell from 170.5 million yuan in 1990 to 29.2 million yuan in 2006. How to adjust the industrial infrastructure and manage production of state-owned factories is still a serious problem today in the TAR as well as for China as a whole. One way to improve the situation is to diversify the ownership structure. Following the reform process, the employees working in state-owned enterprises fell from 82 percent

of total urban laborers in 1988 to 50.7 percent in 2006 in the TAR. Self-employed individuals made up 31.5 percent of total urban laborers in 2006 in the TAR. Many state-owned factories were turned into private or stock companies. The gross-output value of state-owned enterprises (1849.19 million yuan)was only 31.0 percent of the total (5971.53 million yuan) in 2008, and it was 68.3 percent in total in 1990 (SBT, 2009: 169).

According to the *Law of Regional Autonomy of Ethnic Minorities in China*, autonomous regions have the power to issue some local policies (e.g. language policy in schools, a quota of official appointment, recruitment of universities and regulations of family planning programs). But the administrative system in all autonomous regions is the same as in other provinces; basic policy changes (e.g. commune disintegration, relaxed administrative control on migration, private-economy promotion) have been implemented in autonomous regions. Every new policy announced in Beijing will have some impact on the TAR. It may be one step later compared with coastal areas, but the TAR followed all national policies. Unlike the situation before 1951, the conditions for economic development (ownership systems and organizations, channels of funds, technology, supplies, etc.) in the TAR are now similar to those in other regions. But close interaction does not necessarily mean economic homogeneity. We will examine below whether Tibet's economy has become a homogeneous and organic part of the national economy.

Income and welfare

Since the social and economic reform in the 1980s, the income of Tibetans has increased significantly. For employees of state-owned enterprises, the average per capita annual salary increased from 852 yuan in 1978 to 46,927 yuan in the TAR in 2007 (SBT, 2008: 105).

One noteworthy phenomenon is that during the 1990s the TAR enjoyed many favorable policies introduced by the central government. The CCP leadership organized five working conferences for the TAR in 1980, 1984, 1994, 2001 and 2010, and made decisions to raise the salary for the TAR and invest in the launch of development projects in the TAR. As beneficiaries of these policies, the government and state-owned enterprise employees as well as urban residents in the TAR had a higher income compared with workers in other provinces. In 1990 the average annual salary of state-owned enterprise employees in Tibet was 3,224 yuan, which was much higher than the national level of 2,284 yuan (SBC, 1991: 120). Although the local economy in the TAR was not really developed and industry had considerable deficits, the income of workers and urban residents in Tibet was much higher than the average throughout China in the 1990s.

The situation continued after 2000 for state-owned-enterprise employees. The average annual income of state-owned-enterprise employees in the TAR was 30,131 yuan in 2006, only lower than Zhejiang (41,920 yuan), Beijing (41,313 yuan), Shanghai (40,141 yuan) and Guangdong (31.057 yuan), and much higher than the national level (21,706 yuan) (STC, 2007: 154).

But the income gap between urban residents in the TAR and other provinces began to change after 2000. In 2007 the average annual per capita income was 11,984 yuan for urban residents in the TAR, and it was lower than the national level (14,909 yuan) and was the 16th highest among 28 provinces and autonomous regions. The lowest urban income was found in Gansu (10,859 yuan) (SBT, 2008: 321). There are fewer urban Tibetans working in private enterprises, join ventures and foreign companies compared with people living in coastal provinces, where high incomes are common.

Because income data are not available by ethnic groups, to what extent the income level of urban residents in the TAR represents the income of urban Tibetans remains unknown. The Han comprised 34.3 percent of the total official urban population of Lhasa in 2000 (COT, 2002a: 284). Excluding the temporary migrants, most adult Han in cities or towns in the TAR work in government institutions or state-owned enterprises, thereby earning government salaries. The average income levels for the Han can be assumed to be higher than for Tibetan residents, many of whom do not work in the state sector. The income and consumption patterns of urban residents in Lhasa will be discussed in detail in Chapter 7.

In 1985 the average per capita annual net income was 353 yuan for rural residents in the TAR[10] compared with 398 yuan for all rural residents in China. By 1990 the incomes were 447 yuan vs. 630 yuan, the gap having increased from 45 yuan to 183 yuan. In 1995 the average per capita annual "pure income" of Tibetan rural residents was 1,200 yuan compared with the national level of 1,578 yuan. In 2007 the gap increased to 1,352 yuan (2,788 yuan in the TAR and 4,140 yuan for the whole of China) (SBT, 2008: 321). From 1985 to 2000, coastal areas of China developed quickly, especially town and village enterprises. Coastal areas have developed even faster since China joined the WTO in 2001, which opened larger foreign markets to Chinese products. The gap in rural income between the TAR and other parts of China has thus increased rapidly.

The picture is like this: the average income of both rural and urban residents in the TAR now is far behind the national level and most provinces. Meantime, government employees still enjoy a high income in the TAR because of special policies. If these government employees are excluded from the category of urban residents, then the income of non-government-employee urban residents would be much lower than present statistics show for urban residents.

It is clear that the income gap between rural and urban residents, and the income gap between government employees and non-government employees, are

much greater in the TAR compared with that in the Han regions. This is a significant factor we have to take into account in predicting future social changes in Tibet. When poor Tibetan farmers entered Lhasa and other cities, they first found they earned less than Han migrants, and then discovered that government employees in urban areas enjoyed a much higher income and welfare than they did. It is not hard to imagine what they would think of this income gap and social justice.

Trade: Economic exchanges between the TAR and other regions

Table 6.4 shows the growth of retail sales within the TAR from 1978 to 2008. Four trends are noteworthy:

(a) Sales of consumer goods increased much faster than that of productive materials from 1978 to 1994 (8.5 times vs. 2.5 times). This shows that as a region the TAR is becoming a consumer rather than a producer. The growth of consumption is faster than the growth of production. The statistics did not provide data for this classification after 1995, but the trend is very likely to continue, because tourism has become an important sector since 1995.

(b) Sales in urban areas increased much faster than those in rural areas (8.7 times vs. 5.7 times during 1978–1994 and 5.8 times vs. 2.5 times from 1995 to 2008). The urban sector expanded its consumption rapidly in the TAR but it actually produced very little. Most of the economic activities in the urban sector (industrial production, construction, trade, etc.) showed deficits. Tourism becomes a major contributor to the GDP and tax contributor.

(c) The percentage of consumer goods sold to "units" ("work units" managed by the government, as distinguished from individual customers) increased very quickly from 1978 to 1994 (19.8 times vs. 6.7 times for individual customers). These work units bought 33 percent of all the consumer goods yet employees of these units only comprised seven percent of the total population in 1994. According to national statistics, units purchased 10 percent of the total consumer goods in China in the same year. Consumption by units in the TAR was much higher than the average national level because the goods bought by unit employees in stores were calculated as "sold to individuals." The consumption level of unit employees was actually even higher. These government-related units were the major consumption groups in the TAR. Because of the diversified ownership system, the statistics for "(government) units" no longer appear in yearbooks.

(d) Accompanying the economic reform policies that began in the 1980s, there was a rapid development of collective and, especially, private companies in trade and retail sales in the TAR. In 1983 the value of retail sales of collective and private business were 4.68 million yuan and 0.37 million yuan respectively, together comprising only 1.2 percent of total retail sales in the TAR. In 1990

Table 6.4. Total Retail Sales in the TAR (1978–2008) (in million yuan)

	1978	**1980**	**1985**	**1990**	**1992**	**1994**
By object:						
Agri-prod materials	62.9	73.9	150.3	193.0	161.2	160.0
Consumer goods	244.8	286.9	949.8	1,287.0	1,522.7	2,090.1
1. to residents:	210.0	249.4	751.1	887.0	1,032.3	1,400.4
2. to units:	34.8	37.0	198.7	400.0	490.4	689.7
Total retail sales	307.6	360.7	1,100.2	1,480.0	1,683.8	2,250.0
By ownership of shops*						
1. state-owned	227.6	266.8	349.1	777.3	890.3	681.5
2. collective	0	0	206.3	280.8	192.9	33.9
3. joint owned	0	0	6.4	5.3	8.8	10.4
4. private	4.9	5.4	99.3	153.4	395.5	948.7
5. others	12.2	13.6	288.7	70.3	35.1	399.2
Total retail sales	244.8	286.9	949.8	1,287.0	1,522.7	2,073.6
	1995	**2000**	**2002**	**2004**	**2005**	**2008**
By location of shops						
1. city	1,116.3	2,042.4	2,384.3	2,801.3	3,301.3	6,427.8
2. county town	767.8	1,642.9	2,238.9	2,717.8	3,082.2	5,098.6
3. rural areas	546.2	566.9	670.7	799.0	927.0	1,381.8
By ownership of shops*						
1. state-owned	746.8	871.0	1,404.7	1,160.5	1,525.1	2,802.3
2. collective	41.1	90.3	135.7	476.3	731.9	888.1
3. joint owned	5.7	48.9	46.9	6.1	7.7	276.5
4. private	1,287.6	2,801.5	3,314.5	3,659.1	3,234.8	5,842.3
5. others	349.1	440.3	392.1	1,016.1	1,810.9	3,099.0
Total retail sales	2,430.3	4,252.1	5,293.9	6,318.0	7,310.5	12,908.3

* The categories of the retail sale data (1978–2008) by ownership were released in the *Statistical Yearbook of TAR* (2008). The total values of annual total retail sales for the years before 1995 were different from the previous yearbooks. The reason might be the adjusted counting methods by stable currency value.

Sources: Statistical Bureau of TAR, 1989: 422; 1993: 349; 1995: 253; 1999: 245–246; 2009: 229–230.

collective and private retail sales reached 280.8 million and 153.4 million yuan respectively, and private sales alone comprised 11.9 percent of the total. In 1995 the value of collective retail sales was reduced to 41.1 million yuan while private sales increased to 1,288 million yuan, largely exceeding state-owned retail sales (746.8 million yuan), and comprised 53 percent of the total in the TAR. In 2008 the total value of consumer goods sold by the private sector reached 5,842.3 million yuan compared with 2,802.3 million yuan sold by state shops (SBT, 2009: 230). The category "others," usually referring to joint-venture foreign companies, has also become significant in the trade market in the TAR. The retail sale value of "others" reached 3,099 million yuan in 2008.

The category "joint owned" increased very fast in 2008, but it is not very clear what kind of enterprises this category refers to. It probably refers to private stock enterprises that are popular in coastal regions but not in the TAR. In general, it is clear that private business and joint-venture foreign companies developed very quickly and now play a major role in the local economy.

The annual flow of goods in the TAR has been disrupted by in- and out-transportation (Table 6.5). Since there are only a few roads connecting the TAR and other regions, transportation records are generally reliable. These records indicate that grain and oil (food and fuel) are the two main imported goods. Consumer goods (industrial products, cloth, sugar, etc.) and "distributive goods" (which were bought by the government and distributed directly to government units and state-owned enterprises outside trade channels; they include construction materials, equipment, etc.) are also high on the list of imports. Pastoral products and traditional medicines (caterpillar fungus, musk, etc.) are being exported. Chromium ore and timber have recently also been exported.

Table 6.5. In Transportation of Goods into and out of the TAR (1960–2002) (in tonnes)

	1960	1965	1970	1975	1980	1985	1990	1995	2000	2002*
In-transportation:										
Consumer goods	16,300	17,569	13,000	27,940	44,700	42,100	37,595	13,356	59,011	77,955
Grain	9,053	16,259	3,510	13,056	34,700	39,400	95,480	70,272	70,381	70,423
Oil	19,451	22,547	18,068	59,407	79,200	92,300	107,880	7,201	17,572	19,996
Distributed goods	3,452	10,760	6,600	26,898	41,500	77,700	87,126	31,101	45,176	45,209
Others	14,244	9,465	940	23,398	34,398	231,900	34,824	59,976	40,313	42,445
Total	62,500	76,600	42,118	150,699	234,400	483,400	362,905	181,906	232,453	256,028
Out-transportation:										
Pastoral products	-	-	1,768	5,631	4,200	3,300	1,399	7,533	7,652	7,700
Chromium ore	-	-	924	-	22,500	43,800	73,908	69,871	73,855	74,215
Timber	-	-	-	1,566	900	-	8,987	37,659	25,913	26,355
Others	-	-	1,602	19,541	14,900	19,500	17,632	20,447	63,010	64,564
Total	-	-	4,294	27,638	42,500	66,600	101,926	135,510	170,448	172,834

* The in- and out transportation data are not available after 2002 in yearbooks.
Sources: SBT, 1989: 343–344, 441–442; 1994: 298–299; 1999: 232; 2003: 229–230.

From 1955 to 1983, the value of goods imported from other regions of China comprised 82 percent of total goods sold in the TAR. This percentage increased to 94 percent in 1983. The total value of imported goods even exceeded the total value of sold goods in 1990. Although data on sources of goods sold in TAR are not available after 1990, it is still possible to say that trade between the TAR and other Han regions has a strong bias. This trade is sometimes called a "one-way

supply," a "blood transfusion" or "using the central government's financial aid to buy consumer goods from the central government to maintain Tibet's economy and consumption (Wang Xiaoqiang and Bai Nanfeng, 1986: 109)." After several decades, Tibet still depends on consumer goods from other regions of China. In fact, this dependency has increased and reached a very high level.

International trade and tourism in the TAR

There has been limited foreign influence on the economy of the TAR since 1959. International trade represented only a small proportion compared with the total trade of the TAR with other regions of China. For example, the total value of international trade in the TAR was 54.2 million yuan and the trade between the TAR and other regions in China was 1,025.6 million yuan in 1985 (SBT, 1995: 264–265).

Among export goods, the percentage of traditional pastoral products came to 77.3 percent (US$10.77 million) in 1990, and was reduced to 1.8 percent (US$5.84 million) in 2006. Of imported goods in 2006, the most important imports were various machines (US$94.64 million, 89.1 percent of the total imports) and the second category was cars and motorcycles (US$4.89 million) (SBT, 2007: 241). Many machines were imported for construction projects (railway, highway, bridges, electrified wire netting, buildings, etc.) in the TAR.

Imports to the TAR increased from US$16.28 million (76.86 million yuan) in 1990 to US$106.18 million (828.2 million yuan) in 2006, then falled to US$58.22 million (404.5 million yuan) in 2008 largely due to the "March 14" riot in Lhasa. But the value of imports managed by state-owned institutions was only a small part of the total (e.g. only 1.6 percent of the total imports in 1994). This means that most of the import business was managed by private companies, and it indicates a significant structural change in the TAR. In the past, border trade was an important part of international trade for the TAR. It comprised 61.9 percent in 1965, and was reduced to only 3.9 percent in 1994, then increased significantly to 59.5 percent in 2005 (Table 6.6). It indicates that under the more open policies in the TAR, the local government and enterprises have extended to freedom in international trade. Since export trade has been encouraged by government policies, from 1999 to 2008 border trade comprised 60 to 92 percent of total exports.

Income from tourism rapidly increased from 1.3 million yuan in 1980 to 4,851.6 million yuan in 2007 (SBT, 2008: 240), comprising 13.4 percent of the total annual income of the TAR government in 2007. Because of the geographic characteristics and transportation conditions, tourism will develop in the TAR but we cannot say whether tourism will play the leading role in the Tibetan economy in the future. Ethnic tensions and street riots certainly have had a negative impact on the development of tourism in the TAR.

Table 6.6. International Trade in the TAR (1965–2008) (in 10,000 yuan)

Year	Total			Import			Export		
	Total	Border*	Border (%)	Total	Border	Border (%)	Total	Border	Border (%)
1965	693	429	61.9	110	110	100.0	583	319	54.7
1970	474	257	54.2	35	35	100.0	439	222	50.6
1975	1,760	355	20.2	144	144	100.0	1,616	211	13.1
1980	2,463	761	30.9	381	381	100.0	2,082	380	18.3
1985	5,422	1,647	30.4	1,494	819	54.8	3,928	828	21.1
1990	14,267	4,026	28.2	6,581	2,475	37.6	7,686	1,551	20.2
1995	53,726	4,806	8.9	28,784	747	2.6	24,942	4,059	16.3
1998	93,576	6,664	7.1	32,665	1,772	5.4	60,911	4,892	8.0
1999	146,140	69,356	47.5	70,485	7,342	10.4	75,655	62,014	82.0
2000	113,352	94,430	83.3	14,755	5,786	39.2	98,597	88,644	89.9
2001	78,416	67,078	85.5	10,238	4,127	40.3	68,178	62,951	92.3
2002	107,775	50,786	47.1	40,705	3,994	9.8	67,070	46,792	69.8
2003	133,271	64,150	48.1	32,658	4,267	13.1	100,613	59,883	59.5
2004	184,876	74,860	40.5	77,292	4,044	5.2	107,584	70,816	65.8
2005	166,366	98,982	59.5	32,457	5,176	15.9	133,909	93,806	70.1
2006	256,152	137,420	53.6	82,820	3,588	4.3	173,332	133,832	77.2
2007	287,422	181,827	63.3	49,014	2,243	4.6	238,408	179,584	75.3
2008	531,798	166,391	31.3	40,450	1,904	4.7	491,348	164,487	33.5

* The data of "Border" trade were from local border customs records. The other international trade of the TAR was through the customs in coastal regions of China.

Source: SBT, 2009: 235–236.

Income and expenses of the TAR government

In sharp contrast to the slow growth of production, there has been rapid growth in the TAR government's financial deficits. From Table 6.7 it is clear that industry, grain trade, and transportation managed by government were the major sources of deficits in government finance until the middle of the 1990s. Until 1988 the state-enterprise deficits had been much higher than the sum of taxes and other local income. Even in 2006 state enterprise was the main source of financial deficit. The *Statistical Yearbook of the TAR* (2008) does not provide this item, instead providing a new item of "state-owned resources (assets)." It might refer to the income of the government by selling land to private real-estate companies, which has become the major income source of the local government throughout China since the mid-1990s. Meanwhile, it is understood that tax income and fee collection have increased, accompanying the growth of the private sector.

Table 6.7. Income of the TAR Government (1952–2008) (in 10,000 yuan)

	1952	1960	1965	1970	1975	1980	1985	1990
Local income of the TAR								
1. State Enterprise:								
(1) Industry	-	3222	124	-230	122	-537	-2647	-306
(2) Construction	-	69	-24	-69	-27	74	184	-
(3) Agriculture	-	43	6	-1084	476	-1432	-47	-
(4) Post, transport	-	2773	-146	-1844	-2421	-3029	-1816	-
(5) Grain, trade	-	-	-221	-268	-3098	-1904	-6406	-
(6) Others	4	35	-83	-390	-174	-1596	-816	-
Subtotal	4	6143	-343	-3885	-5122	-8254	-11548	-167668
2. Tax	137	1316	1208	1187	1953	2030	4544	13694
3. Others	118	2360	881	556	184	251	967	4881
4. Depreciation	-	342	493	-	-	-	-	-
Total	258	10167	2239	-2142	-2985	-5973	6037	1809
Finan. aid from centr. Gov.	1047	2725	11805	18345	29179	60104	105772	124389
Total income of TAR	1305	12886	14044	16203	26194	54131	99735	126198
% of aid in total TAR income	80.2	21.1	84.1	113.2	111.4	111.0	106.1	98.6
	1995	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2008**
Local income of the TAR								
1. State enterprise:	-	-10156	-	-	-9186	-9123	-9149	-
2. Operational income of State-owned assets		837	-	-	872	1169	1683	2038
3. Taxes	20922	50652	53587	58140	65387	71917	81458	151865
4. Revenue from administrative and institutional units	-	834	-	-	6318	10505	16289	15698
5. Penalty	-	2029	-	-	2928	7941	5841	9152
6. Special revenue	-	1607	-	-	2580	3106	3469	15800
7. Other revenue	-	8045	-	-	12572	14673	20721	33511
8. State-owned resources (assets) compensation for use of revenue	-	-	-	-	-	-	-	20759
9. Fund budgetary revenue	-	9417	-	-	18843	19711	23018	37049
Total	21500	63265	73790	87325	100342	119899	143330	285872
Finan. aid from centr. Gov.	313440	635957	944776	1311470	1287564	1359655	1915340	3578559
Total income of TAR	376088	699222	1018566	1398795	1387906	1479554	2058670	3864431
% of aid in total TAR income	83.3	95.0	89.0	93.8	92.8	91.9	93.0	92.6

Sources: SBT, 1989: 470–471; 1994: 139–144; 1999: 101–102; 2003: 99–101; 2009: 87, 89.

Meanwhile, the expenses of the TAR government have increased rapidly. In 1988 the local income of the TAR government was only 2.3 million yuan while expenses were 1,047.7 million yuan. Therefore, the subsidy of 1,030.8 million yuan from the central government (99.8 percent of the income of the TAR in 1988) was essential in maintaining the functioning of the government and its economy. Of the TAR government's total income from 1952 to 1959, 89.0 percent was financial aid from the central government. In the 1960s it was 84.3 percent, which increased to 106.7 percent in the 1970s and 104.7 percent during the 1980s and 90.5 percent from 1990 to 1994 (it was more than 100 percent because sometimes it also covered the deficits in local production) (SBT, 1995: 470). Table 6.7 indicates that financial aid from the central government still comprised about 92.6 percent of the total annual income of the TAR government in 2008.

In order to understand the new characteristics of the TAR's economy, it will be helpful to examine the structure of government expenditure. The annual expenses are shown in Table 6.8. From 1960 to 1995, administrative expenses increased 29.4 times, expenses for education/cultural/health care expenses (including education, health care, scientific research, sports, etc.) increased 99.9 times. From 1995 to 2006, administrative expenses increased six times while education/health/culture expenses increased 5.5 times. In comparison, the expenses of agriculture increased 6.9 times from 1960 to 1995, and 8.1 times from 1995 to 2006. It seems that the TAR government paid less emphasis to rural development before 1995, and began to focus on agriculture after 2000.

"Construction" has been an important part of government expenditure since 1959. It comprised 48.6 percent of government expenditure in 1960, 33.7 percent in 1980, 23.7 percent in 2000, and 29.0 percent in 2006. The characteristics were also noticed by western scholars. "Growth has been concentrated in urban services, particularly administrative expansion, and large-scale construction projects (Fischer, 2005: 32)."

One of the major sources of financial deficit in the TAR has been administrative expenses. It is worth noting the rapid increase in the number of government employees. Employees of state-owned institutions increased from 40,487 in 1959 to 150,657 in 1989, before becoming stable. In 2008, of the total 484,316 non-agricultural laborers in the TAR, 189,798 were under the state-owned units (39.2 percent) and 281,373 were in private sector (58.1 percent)(SBT, 2009: 43). Although the number in private business and those self-employed have increased rapidly in recent years, the number of government employees was still quite significant.

Among a total 1,150,696 rural laborers in 2008, 267,913 (23.3 percent) were engaged in non-agricultural activities: 23,925 were in manufacturing, 75,948 were in construction, 34,985 in transportation, storage and post, 29,358 in trade, 9,326 in hotels and restaurants, and 593 in information and computer services (SBT, 2009: 42). It almost matches the size of urban laborers in private business (281,373). It

Table 6.8. Expenditure of the TAR Government (1952–2008) (in 10,000 yuan)

	1952	1960	1965	1970	1975	1980	1985	1990	1995
Administration	712	1843	2899	2494	3873	7599	13249	19647	54276
Edu/cultural/health	192	595	1268	1062	3430	7692	17099	28076	59440
Agriculture	20	1362	1452	1190	1785	1446	6077	7236	9462
Urban maintain	3	24	39	100	50	273	1933	1483	1830
Industrial subsidy	-	1361	1452	1190	2012	2245	7148	1629	2570
Construction	43	7510	3648	4619	8164	15716	34241	14651	80222
Industrial units	-	262	531	524	2805	6130	10903	6829	
Prospecting	-	172	114	192	1865	189	698	-	-
Welfare	-	26	192	104	249	1532	1391	3619	-
Price subsidy	-	-	-	-	-	-	2239	5442	-
Circulating fund	-	2984	583	166	1220	221	190	-	-
Militia	-	-	-	-	94	171	115	173	-
Others	7	402	587	163	285	4834	13725	40457	130758
Total	977	15450	11313	10613	24026	46602	102941	129242	348749
	1999	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2008***
Administration	87662	106392	143065	186273	200566	241636	279559	322954	640632
Edu/cultural/health	112467	122233	151273	168824	219362	250344	312830	329395	726482
Agriculture	14218	13397	12663	12536	40011	51159	59904	77578	628701
Urban maintain	4125	3848	4837	5401	5020	4050	4329	5347	317024
Industrial innovation	2481	3465	3261	2314	2233	4037	3292	2775	184207
Construction	116338	145768	348096	546749	594347	324028	563995	585771	351034
Units operation	23871	19791	27855	36052	31348	40386	43372	43142	279000
Science-technology	2024	2300	2616	6704	3603	4039	4437	5483	29033
Others	169358	182499	352024	413580	362564	418656	582784	629524	343861
Fund budgetary expenditures	11679	16415	16377	20471	22912	22355	37110	21055	33584
Total	544223	616108	1062067	1398904	1481966	1360690	1891612	2023024	3840173

* The items in *Yearbook* (2008) and (2009) are different from the previous years. The items in the column 2008 are reorganized and should be as follows in brackets: "administration" ("general public services"), "edu/cultural/health" (the sum of "education," "cultural education and summon matchmaker," and "medical and health"), "agriculture" ("agricultural forestry water affairs"), "urban maintenance" (the sum of "urban and rural community affairs" and "environmental protection"), "industrial innovation" ("industrial business and financial affairs"), "construction" ("transportation"), "units operation" ("social security and employment"), the rest of the three items ("science and technology," "others," and "fund budgetary expenditures" remained the same.

Sources: SBT, 1989: 473–475; 1994: 142–143; 1999: 103–104; 2007: 90; 2009: 90.

seems that a large proportion of rural Tibetans have entered the service sectors in cities and towns. Rural-urban migration in the TAR becomes an important factor in social changes and urbanization.

Bank records in the TAR show that, in 2006, cash withdrawals for the "salary and bonus of the employees of state-owned institutions" came to 6,555 million yuan (Table 6.9). This item was about 32.4 percent of total expenses (20,230.2 million)

of the TAR government in 2006. The percentage was even higher in previous years. For example, this percentage was 39 percent in 1994. Considering the additional expenses for their housing, transportation (including home leave for vacation of Han employees), etc., these employees actually consumed a very large proportion of the government's money. This table also shows that withdrawn of individual deposit has become a huge proportion of cash withdrawn from banks in the TAR. Its percentage in total cash withdrawn increase from 9.8 percent in 1980 to 48.3 percent in 2006. In the past, not many people had personal accounts in banks, the amount of individual (i.e. not government units) deposits and withdrawals was very small. It indicates that personal wealth and private capital have increased significantly since the implementation of China's reform policy.

As in other Chinese cities and towns, the TAR government has supplied urban residents with grain, oil and other necessities at low prices. But the cost of these goods is actually much higher in the TAR because they have to be transported thousands of miles from other regions. In order to maintain market prices and social stability in the TAR, market prices in the TAR were lower than their actual value (production cost plus transportation expenses). The price subsidies paid by the TAR government was 220 million yuan in 1994, accounting for 6.6 percent of total government expenses. Those subsidies are included in the category of other expenditures (about 10 percent of the total expenditure in 2007) in statistical yearbooks.

Buying agricultural products (especially grain) from farmers at a high price and selling them to urban consumers at a low price is a strategic plan to promote agricultural production while keeping urban residents (who have enjoyed low-priced goods for several decades) satisfied. This has been a large financial problem for the Chinese government, especially since economic reforms were implemented in the 1980s.

The problem is even worse in the TAR. Because of central government directives no agricultural tax has been collected in the TAR since 1980. The TAR government can only negotiate with Tibetan farmers for the amount and the prices at which they are willing to sell. Because many farmers have a tradition of storing grain at home in anticipation of drought and flood, the government can buy only a limited amount of grain. In 1985 total grain production exceeded 500,000 tons in the TAR, or 250 kg per capita. This generally met the basic needs of the people in the TAR. But the government only purchased 4.5 percent of total production (Li Zhuqing, 1990: 44). The grain the government purchased constituted only 6.5 percent of the total production in 1987 and 5.9 percent in 1994 (SBT, 1995: 257). Apart from grain, meat (mainly pork) also needs to be imported from other provinces annually (Bai Tao, 1995: 119).

The grain (mainly barley) the TAR government purchased from farmers was used primarily by herdsmen in the grasslands, with a small amount going to agricultural areas. The grain supply to urban residents has been mainly from

Table 6.9. Structure of Cash Payments or Withdrawals from Banks in the TAR (1960–2007) (in 10,000 Yuan)

	1960	1965	1970	1975	1980	1985	1990	1995
Salary bonus of state employees	1365	3692	4567	6635	15241	29613	46541	148404
Others paid to individuals	-	295	318	695	1889	9200	13757	40956
Withdrawn by military	1084	3129	3888	3857	3789	7558	22939	71181
Salary/bonus of urban col. enterp.*	31	65	62	34	866	1656	5538	20373
Withdrawn of private enterprises	-	-	-	-	-	207	4375	39186
Payment for local products	1258	2059	1697	1527	1226	3178	9364	20007
To rural credit cooperatives	-	146	208	1546	4612	6210	16452	68399
Overhead of administration	199	1034	908	2110	3546	4512	10101	65419
Payment for industrial products	-	-	-	16	79	197	324	3363
Withdrawn of individual deposit	360	1116	1512	1671	3629	13438	35457	214797
Expenditure for debts	-	-	-	-	-	-	172	87117
Remittance	16	64	15	122	296	1086	2266	23661
Others	402	672	650	1652	2006	7880	15616	142960
Total	4715	12272	13825	19865	37131	84735	182467	945820
	2000	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**
Salary bonus of state employees	261521	314822	413019	484037	551693	562488	655551	1732777
Others paid to individuals	82876	94406	141128	221498	191881	189032	209513	-**
Withdrawn by military	188588	211411	236013	304911	342428	329337	398901	-**
Salary/bonus of other units	44186	45246	73891	152523	223004	236219	263030	-**
Withdrawn of private enterprises	136078	152958	193732	244800	255002	247602	312950	317167
Payment for agricultural products	30453	39830	41584	50355	68883	68391	90368	155107
Payment for industrial products	99730	9902	6441	7237	3750	8383	2834	70484
Exp. of other financial institutions	2117	21786	3762	10169	6298	6744	469	556
Overhead of administration	194677	254719	295652	380624	383945	439624	583837	721265
Withdrawn of saving deposit	697287	888951	1254745	1680303	2746551	2570481	3237436	3821174
Loan to individuals	28297	40238	82368	136546	145267	155399	246648	232687
Expenditure for securities	3837	1132	1546	1572	991	3432	1001	1813
Remittance	72112	90004	106171	123025	131629	155498	121051	116617
Others	158297	197457	282241	463826	573975	612078	585925	798371
Total	1910296	2362862	3132293	4261426	5625297	5584708	6709514	7968018

* Salary/bonus of urban collective enterprises.

** Four items ("salary and bonus of state employee," "others paid to individuals," "withdrawn by military," "salary/bonus of other units") are not accounted for in *Yearbook* (2008); they were replaced by "wages and other expenditures (paid to individuals) (1,732,777 yuan)."

Sources: SBT, 1989: 482–483; 1994: 335; 1999: 264; 2003: 254; 2005: 250; 2007: 248; 2008: 246.

imports. From 1981 to 1990, the government purchased a total of 440,000 tons of grain; 92,000 tons were sold to agricultural areas and 348,000 tons were sold to pastoral areas. Of the total only 21,000 tons of barley were used to supply urban residents. The grain price subsidies for agricultural and pastoral areas were 264 million yuan. During that period, the government imported 1,050,000 tons of grain

from other provinces of China and paid 560 million yuan in price subsidies. For example, in 1992, locally produced and imported grain was sold in the markets at 0.86 yuan/kg and 0.914 yuan/kg, but the government-paid subsidy was 0.91 yuan/kg and 1.34 yuan/kg respectively, so the "subsidy" was higher even than the market price (Bai Tao, 1995: 150–154). Before the railway started to operate in 2006, the imported grain had to be transported from other provinces to Golmud by train and then 700 miles by road to Lhasa by trucks. More than 50 percent of the cross-provincial transportation trucks were used for carrying grain. It has been a very heavy burden on the TAR's finances. Grain imports reached their highest volumes in 1990 (95,480 tons), and then fell to around 70,400 tons after 1995 (Table 6.5). In comparison, the price of grain imported from Nepal costs only 70 percent as much as the grain imported from Han regions, which explains why it has been suggested that grain imports from Nepal be increased (Li Zhuqing, 1990: 175).

One noteworthy phenomenon is the increase in expenses as "others paid to individuals" since 1977: from 3.64 million yuan in 1977 to 15.56 million yuan in 1978, reaching 215.95 million yuan in 1988 and 2,095.1 million yuan in 2006 (Table 6.9). In the 1980s and 1990s, such an increase was due largely to reimbursement for damages and losses to monasteries and individuals during the Cultural Revolution. This item ("other expenses") does not appear in statistical yearbooks in other autonomous regions (e.g. Inner Mongolia). It accounted for 27.2 percent of the total TAR government expenses in 1990, or 19 times the local income of the TAR government in that year. In 1994 and 2006, this item still amounted to 15.4 percent and 10.4 percent of total government expenses respectively. This item reached 2,095.1 million yuan in 2002, showing that the government still keeps a large amount of money to pay individuals for reasons beyond their salaries and bonuses (Table 6.9). During our 1988 survey, we learned how money was paid to aristocrats, monks and other Tibetans who returned to the TAR from exile abroad. In order to attract more Tibetans in exile to return, the government usually provided them with housing and subsidies and compensated them for all that they claimed they had lost by fleeing. When they claimed for losses from the 1959 rebellion and following land reform (housing, lands, animals, jewelry, etc.), they also received monetary compensation. These aristocrats and senior monks asked the government to return their houses in Lhasa. But the houses had been distributed among the former servants and slaves of the aristocrats for free in 1959, and they and their families still lived in the houses. The government had two choices: one was to provide larger and better housing for these families for free and persuade them to move out, then repair the houses and return them to the previous owners; or satisfy these aristocrats by paying them a huge amount of money as "compensation." I heard several such stories during our 1988 survey in Lhasa.

Since 1959 the monasteries have lost their power not only in society and administration but also in wealth. The number of monks has also fallen. However,

government administration has expanded and the number of cadres has increased. Subsequently, they have become the main consumers of wealth in Tibet. Before 1959 there were 114,000 monks and about 1,000 lay officials. In 1994 there were 41,800 monks and about 161,000 employees working in government institutions or other units under government management in the TAR. The salaries, bonuses, welfare and all kinds of subsidies received by these government employees amounted to 118.3 million yuan in 1994, 21.3 percent of the TAR's total annual expenses (SBT, 1995: 272). The employees of the government and state-owned enterprises totaled 177,015 in 2006. Salaries, welfare and administrative overheads together made up 32.4 percent of the total expenditure of the TAR government in 2006. Because administrative expenditure has been kept so high, the central government has had to keep providing financial aid to the TAR.

So a clear picture emerges of the TAR's financial situation. Obviously the central government has played an essential role: (a) paying to maintain the functions of the local government (administration); (b) feeding 177,000 government employees (67.8 percent were Tibetans); (c) maintaining the programs in education, health care, welfare, public services, carrying out urban and rural infrastructure projects and creating jobs for urban youth; (d) providing subsidies and materials to improve agricultural and pastoral production; (e) supporting local industrial production, which has continuously maintained deficits; (f) providing funds to re-build monasteries and subsidies to cover religious rituals; and (g) providing cash to reimburse the monasteries and individuals affected by the 1959 land reform and the Cultural Revolution. It must be said that these policies had a positive impact in many ways in helping local social and economic development, improving living conditions and maintaining social stability in Tibet.

Generally, if only standards of income and consumption are considered, Tibet seems to be close to the last stage of Hechter's diffusion model. Income and consumption of people in the periphery are nearing that in the core. But one question remains: the ideal type of diffusion model assumes full modernization in the periphery, which becomes economically strong and able to support its residents' incomes and consumption at the level of the core region. The situation is different in the TAR, where the increase in income and consumption depended largely on financial support from the central government (the core), not based on its own economic development. In the past three decades, the central government has raised the standard of governmental employees' incomes in the TAR and made it 2.5 times higher than that of people working in nearby provinces (Yunnan, Qinghai, etc.). This policy is the major reason behind the rise in urban incomes in the TAR.

As discussed above, Chinese social and economic structures have been established in the TAR, and urban residents (both Tibetans and Han) in the TAR actually earn more than the national average. It might then be assumed that the TAR is close to the last stage of the diffusion model. In Hechter's theory, at the stage

when the periphery is economically developed, "cultural differences should cease to be socially meaningful . . . the core and peripheral regions will tend to become culturally homogeneous because the economic, cultural and political foundations for separate ethnic identification disappear (Hechter, 1975: 8)."

Many people in China point to the TAR as a diffusion-model success. It seems that the situation in the TAR is not so simple. Cultural differences, especially religious differences, still exist. Ethnic tension has even increased in recent years, especially with the involvement of Tibetan organizations in exile and western supporters of the "Free Tibet" movement. Efforts to develop modern industry in the TAR have largely failed. The establishment of administrative and economic systems of the Han regions in Tibet has been completed, but with some unintended consequences, the most important of which is the high financial dependence on the central government.

Although the absolute sum of the central government's subsidies to the TAR is not very large, it is substantial if calculated in per capita terms. In 2007 financial aid from the central government to the TAR was 28,041.3 million yuan, about 10,249 yuan per capita in the TAR, while the national average rural annual income per capita was only 4,140 yuan (SBT, 2008: 87, 321). Since the direction of money and product flows have been from the central government to the TAR, it is not fair to condemn the management of the Chinese government in the TAR is as "internal colonialism."

The economy in the TAR should be called a "dependent economy" rather than a case of "dependent development (Evans, 1979: 32)." No accumulation of capital and industrialization took place in the TAR, despite central government efforts to finance and promote industrialization. When I first discussed this "dependent economy pattern in the TAR" in Chinese (Ma Rong, 1993b: 27) and English (Ma Rong, 1995: 70), my opinion was criticized as "denying the great success of socio-economic development in the TAR under the leadership of the central government." Now more and more people are discussing the financial "dependency" of Tibet on the central government of China. "Tibet has moved from quasi-stagnation before 1959 to a plateau of rapid dependent growth today (Sautman and Eng, 2001)." "The term 'dependent' here means that the growth derives from central government funding (Goldstein, et al. 2006: 193)."

Reasons for the Formation of Two Economic Patterns in the TAR before and after 1951

Before 1951

We discussed many major aspects of Tibet's economy (production, ownership, trade, consumption and finance) in the second part of this chapter and suggested

that the economic pattern before 1951 was a "monastery economy" based on "an estate and serf system." Now the question becomes how did this pattern form in Tibet and last until the 1950s?

The economic and political power of religious groups was established and expanded gradually. During the time of Trisong Detsen (A.D. 756–796), every monk was assigned three peasant households and became a slave owner (Dungkal Losang Trinley, 2001: 18). King Ralpanchen (A.D. 815–838) "ordered that every seven families in Tibet must financially support one Buddhist monk, and he elevated a monk to the position of Chief Minister (Grunfeld, 1996: 36)." During his domination, monasteries received estates and lands and some senior monks became lords of estate and serfs (Dungkal Losang Trinley, 2001: 20). Because monks had such strong economic power they naturally acted to protect their economic interests and to acquire political powers. These were the basic elements in the formation of the economic and political structure that emerged in Tibet.

The local authorities, combining religious groups and aristocrat families, spread to most areas of Tibet in the Sakya Regime (12th century). Through appointments by the Mongol Yuan emperors, these religious and lay leaders strengthened their power and their legal control over the estates and serfs. The "estate system" under three types of owners (monasteries, senior government officials and aristocrats) was formally established in the 17th century (Ya Hanzhang, 1991: 52–54).

The history of Buddhism in Tibet can be traced back to the period of Songsten Gampo (A.D. 620–649). At that time, Buddhism was brought into Tibet by both Princess Wen-cheng of the Tang Dynasty of China and a Nepalese princess, both of whom married Songsten Gampo, the King of Tibet. Buddhism developed quickly in Tibet from 756 to 838, but suffered a great deal during the Langdarma Period, and was revived in the 11th century. When the Mongols controlled Tibet in 1251, the Sakya Sect was the first religious order that established an administration in the Tibet areas under Mongol domination (Grunfeld, 1996: 39).

In the 15th century Master Tsongkhapa (1357–1417) established the *Gelugpa* persuasion (Yellow Hat) of Tibetan Buddhism and built Ganden Monastery in Lhasa. Because of serious conflicts between the administrative authorities and the monasteries, the 5th Dalai Lama, as leader of the *Gelugpa*, asked Mongol Gushi Khan to occupy Lhasa. The 5th Dalai Lama controlled all of Tibet in the 17th century after Gushi Khan passed away. He created the monk officials in administration and distributed many estates and serfs to monasteries. Through these measures, the foundation was built for the domination of Tibet by a religious entity, and gradually a complete system developed, combining religious leadership and administration. From a historical perspective, it is clear that the development of both the estate-serf system and the political regime, which combined religious leadership and administration, were parallel in their development.

In an effort to secure religious and political power, the *Gelugpa* received strong support from the Qing emperors beginning in the 15th century. There might be

several explanations for this support: there were strong *Gelugpa* Buddhist influences among the Mongolian tribes and support for Tibetan religion leaders dampened any Mongol notions of revolt against the Qing; *Gelugpa* Buddhism advocated destiny and promoted the worship of the Buddha as a way of making sure the next life would be better. This focus on the next life made people more subject to domination by the clergy, who were the arbitrators of the incarnation process; *Gelugpa* Buddhism proscribed killing and therefore military forces were not developed, enabling more control by the Qing emperors; and leaders of the *Gelugpas* were not selected by heredity but through a process of reincarnation. There were often conflicts among aristocratic families and monasteries during the process of selecting the Dalai Lamas and other senior monks. These conflicts made it difficult for Tibet to become a unified and strong power as each side sought support from the central government for their candidates, and it strengthened the Qing emperors' power and authority over Tibet. After a number of rebels and riots, "at all events his short, tempestuous region convinced the Emperor (Qianlong) that a hereditary kingship did not provide a solid foundation for peaceful government in Tibet. The reforms of 1750 put the temporal supremacy of the religious hierarchy on a lasting basis which was never afterwards challenged (Richardson, 1962: 58)." With the powerful support of the Qing Dynasty, the religious regime of Tibet overcame many political and military crises and survived until the end of the 19th century, when the Qing Dynasty became too weak to exert itself.

The geographic characteristics of Tibet isolated this area from other regions and had a strong negative impact on its communication and interchanges with the outside world. Low productivity and isolation provided rich soil for religious belief. People suffering from the harsh environment and hard life searched for extrication in religion. Meanwhile, all religious groups, from Bon (Tibet's native religion) to *Gelugpa*, developed themselves in cooperation with the civil authorities, and finally a theocracy emerged in Tibet. These were the internal reasons that allowed such a system to appear and develop. Isolation and support from the Qing Dynasty were the external reasons for its emergence. When all factors worked together, the economy of Tibet gradually transformed into a "monastery economy."

Reasons for the formation of a "dependent economy" in the TAR after 1959

The major characteristics of the economy of the TAR since 1959 have been discussed above. How did this pattern emerge and what factors played key roles in its formation?

The basic idea behind the Chinese government's policies is to guide social and economic development in the ethnic minority regions in a manner very similar to the "diffusion model" suggested by Hechter. Two points need to be stressed.

First, this policy fits the goal of "large unification," in which China establishes the same institutions, systems and practices of all of its policies throughout the nation. Second, this process was enforced by administration from outside in a very short period of time, not a natural diffusing process.

This policy is rooted in the view that the regions inhabited by the Han, above all coastal China, are the "core," giving rise to the view that the "peripheries" would follow suit. This assumes that the social structures and policies in "core" regions inhabited by Han will act as models for all the ethnic minority areas. However, these minority regions have their own traditions that were developed within their local environments. The Chinese government moved to establish its structures and policies in Tibet and the other ethnic minority regions. Given the difficult natural environment and a very low population density in areas such as Tibet, however, the practice of reform easily led to a "dependent economy."

It is certainly important to provide financial aid, commodities and skilled labor to help some ethnic minorities disadvantaged by socioeconomic development. These measures will lessen the economic gap between the majority and some disadvantaged minority groups and strengthen national unity. But this policy might have a negative impact, specifically increasing financial and material dependency on the central government. When the local economy does not find its own way to develop and be more creative, more subsidized factories are built, more deficits incurred and the level of dependence increases. The difficulty for the central government is to find a way to help Tibetans develop their economy in a manner that is appropriate to their environment and reverses the pattern of dependency.

The planed economy in effect in China after 1949 allowed for the systematic support for and maintenance of the "dependent economy" in ethnic minority regions. Capital, labor and materials could be distributed among the regions solely by government order. The planned economy paid less attention to economic efficiency and profit making than to political concerns and completing production plans. Therefore, the deficits in ethnic minority regions were not considered serious problems by the government.

Although the geographic areas in which ethnic minority groups live are large, their population only constituted 8.4 percent of the total population of China in 2000. If 91.6 percent of the population helps the remaining 8.4 percent, the per capita burden is limited. Therefore, the cost of these affirmative-action programs was not burdensome for the Chinese government.

Historical tradition was yet another reason. During the Qing Dynasty, all financial deficits of the Dalai Lama and Tibetan government were covered by the Qing government. For example, Tibet's war indemnity for its resistance against British invasion was paid for by the Qing government. Until the 1911 revolution, Tibet had relied on the Qing Dynasty to cover any financial shortfalls. From 1951 to 1959, maintenance and operation of the PLA troops and the Tibetan

Work Committee of the CCP in Tibet was supported financially by the central government, and when the Committee was turned into the new administration (the Preparatory Committee for the TAR), its operation naturally continued to rely on the central government. "Depending on the central government financially" has a historical tradition in Tibet.

Linkages between the two economic patterns before and after 1951 in the TAR

How was the monastery economy controlled by, and in service to, religious groups, and transformed into a dependent economy that relied on financial assistance from the central government? Are there any links between the two?

First, the change between the two was carried out by the revolutionary measures of "total destruction" and "total re-establishment." It began with an attempt by outside forces to destroy the existing systems. Land reform and collectivization liberated more than one million serfs and slaves, confiscated or redeemed (depending on whether the owners fled to India) all productive materials (land, animals, pasture, etc.) and distributed everything to the former serfs and slaves. Monasteries, aristocrats and former senior officials lost all their power and property. The theocratic regime was abolished by force. This revolutionary measure made it possible for a new system to be born in Tibet.

Secondly, an entirely new economic and administrative formation was established; radically different from the old regime. This new setup was imported from outside and did not emerge from the native soil due to a changing environment. Nor was it an attempt to add new elements that could be grafted onto the old foundation. It was the "new planting" of a tree from a thousand miles away without considering the differences between soil and climate at its origin and its destination. Because the tree was unable to obtain the necessary nutrients locally, even the nutrients had to be transported from the place of origin. For example, there were no factories in Tibet and no evidence of a desire on the part of the Tibetans to build them. These factories could not survive owing to a lack of raw materials, a lack of energy supply and a lack of skilled labor and qualified managers.

Revolutionary measures ("total destruction" and "total re-establishment") resulted in the planting of an alien system. The two systems (planned economy and monastery economy) shared an important characteristic in common: lack of interest in economic profits. Both saw ideological and political purity as their highest priority. *Gelugpa* Buddhism and the Dalai Lama's government were primarily concerned with religious rituals; for them the real purpose of economic production was to support religious activities. This emphasis led to very little interest in improving production for centuries.

The central government of China liberated serfs and embarked on developing industry. Efforts in the TAR after 1959 were aimed at turning Tibet into a developed socialist society. Ideology and national unification were always prime concerns. The CCP was eager to change the ownership system, establish its own political and administrative systems, raise the standard of living, promote industrialization in Tibet and finally to integrate Tibet into China politically and economically. The priority was not how to improve the efficiency of investments and achieve profits. In short, there were shared ideological and political priorities of the Tibetan ruling elite and the Chinese central governments (both the Qing Dynasty and the People's Republic).

But of course, there were significant differences between the monastery economy and the dependent economy. Administration and religious activities were supported by the serf system, which exploited serfs and slaves whose labor was used to support religious ceremonies and consumption by serf-owners. Aid from the central government of China came from other provinces through a centrally planned economic system. The wealth was the accumulation of the peasants and workers' work (and taxes since the 1980s) and it was intended to benefit Tibetans and overcome resistance to Chinese rule. In these three aspects – the sources of wealth, the methods of wealth collection and the way to use wealth – the Dalai Lama's regime and the Chinese government were different.

Two Models of Development in the Periphery

The two-model framework (a diffusion model and an internal colonialist model) suggested by Hechter provides a useful framework to understand the social and economic development of Chinese peripheries. From this framework, it is clear that the policies that the central government of China carried out in the TAR should be classified as a diffusion model and not an internal colonialism model. After 1959 Tibetan serfs and slaves received freedom and all residents in the TAR were given rights as citizens. The social and economic systems of the "core" was established in the TAR, but the operational results of these systems were not satisfactory and led to a dependent economy. Per capita income and consumption in the TAR already exceeded the national average, but the income (especially of urban residents) and welfare were dependent on financial subsidies from the central government. As a result the TAR cannot be called a successful example of the diffusion model. The social and economic development process in the real world is much more complicated than the theoretical models.

As Hechter stated, "the core is seen to dominate the periphery politically and to exploit it materially . . . The superordinate group, or core, seeks to stabilize and monopolize its advantages through policies aiming at the institutionalization

of the existing stratification system (Hechter, 1975: 9).” In both the diffusion and internal colonialism models, the core authorities would introduce the administrative system into the periphery in order to control and manage the periphery, but the aim and the results are different. One is really to develop the economy and improve the living standards in the periphery, the other is to exploit the periphery. Some Uygur dissenters criticized the Chinese government for exploiting resources (oil and natural gas) in Xinjiang while providing limited subsidies to the region. In the case of the TAR, since the TAR has limited resources and absorbed a lot of financial subsidies from the central government, the direction of money and product flows have been from the central government to the TAR. It is not fair to criticize as “internal colonialism” the management of the Chinese government in the TAR.

The internal-colonialism model has been widely criticized as being detrimental. The diffusion model has been considered by many to be the ideal for all parts of a nation (core and peripheries) in order to develop a common prosperity. Reviewing the process experienced by the TAR in the past five decades, one question stands out: why didn’t the diffusion model work? What adjustment should be made given the actual conditions?

First, the same administrative and ownership systems established in Tibet as in other parts of China do not guarantee the real development of economic activities and productivity in Tibet based on modern science and technology. The system reform should result in the industrialization of peripheries and the integration of economic structure and development levels at both the core and peripheries.

It is a fact that the present economic system (ownership, management) in the TAR is the same as in other parts of China. It is also a fact that there are close economic connections and exchanges between the TAR and central China. Yet things are not that simple: (a) when the new systems were introduced into the TAR, consideration should have been given to the fact that the TAR was a totally different “social soil” for these systems; (b) the same systems do not always result in the same economic activities (productivity and efficiency); (c) the economic transactions between the TAR and other parts of China are mostly a one-direction flow, not a real “two-direction exchange”; (d) production (agriculture, animal husbandry, handicraft, etc.), to a considerable extent, still uses traditional skills and technology of the past. Considering these points it is safe to say that the TAR has not integrated into China’s economy and society as an organic part. The TAR does not play the same or similar functions as other parts of China play in national economic activities. Consequently, the integration of the TAR with other parts of China is still in the process of being completed.

In Hechter’s theory, when the periphery develops economically, “initial regional differences become muted following industrialization . . . in the long run, the core and peripheral regions will tend to become culturally homogeneous because the economic, cultural, and political foundations for separate ethnic identification

disappear (Hechter, 1976: 8).” If we judge this point to be accurate then the fact that there are still broad differences in culture and religion between Tibet and other parts of China can be seen as further evidence that the TAR has not been integrated into the “core” economically.

All national governments hope that their peripheries will develop in order to promote national integration and release them from the financial burden of providing subsidies. This was a major reason for the Chinese government’s promotion of industrialization in the TAR.

As Hechter noted, “Industrialization is usually conceived to be a necessary condition for intensifying contact between core and peripheral groups. Processes operating at various levels of social organizations should reduce much of the diversity characteristic of pre-industrial societies (Hechter, 1976: 22).” But facts proved that the road to industrialization in ethnic minority regions was always very difficult. In studies of modernization and development, he suggested that “once the peripheral group becomes exposed to the cultural modernity of the core, its values and normative orientations ought to undergo transformation. Frequently, however, this does not seem to occur. … The maintenance of peripheral cultural forms and customs is an irrational reaction by groups which seek to preserve a backward life-style insulated from the rapid change of contemporary industrial society. The traditional life-style is a comfortable one (Hechter, 1976: 23).” It indicates that cultural differentials and conservative feelings blocked economic integration between the core and peripheries. If only the choice between tradition and modernity could somehow be placed before individuals of the peripheral group, some have felt, modernity would easily win over (Hechter, 1976: 23).” But reality is not so simple.

Under the conditions of political unification, people try to explain why ethnic minority groups in many countries strongly seek to preserve their traditional culture, develop very slowly economically and do not integrate with the majority. Some believe that cultural factors (differentials between traditional values, norms and modern values) block economic integration. Others think that slow economic integration blocks cultural integration. “How can this survival of traditionalism within a sea of modernity be accounted for? The simplest, and most frequent explanation is that the peripheral collectivity is not, in fact, economically integrated into the society (Hechter, 1976: 28).” But this simple conclusion cannot explain the complex reality.

In the case of the TAR, the central government did make a great effort to push industrialization in Tibet and to integrate it into the national economy. But when two ethnic groups have great differentials in their cultural traditions (language, religion, value systems, etc.), the economy is not always the decisive factor in their interactions. In the process of economic development in the peripheries, funds and materials do not always work. Having enough capital does not mean efficient

economic activities can be organized anywhere, and money does not always make people happy.

The social and economic systems of the "core" were established in the TAR, and the central government invested a great deal of money and materials to promote economic modernization in Tibet. But rather than generating "diffusion-industrialization," this effort over several decades produced "reform-dependence." Therefore, based on our analysis of the TAR case, the diffusion model can be adjusted. After the first step of system reform, there might be two alternatives or options: the periphery realizing industrialization through competition (not excluding some assistance from the central government) resulting in a diffusion-industrialization model, or, after the reform, the finances of the periphery can become the responsibility of the central government, resulting in a dependent economy or, to a certain extent, a closed dependent economy that can be termed a reform-dependent model. We believe that after such an adjustment the two-model framework (diffusion model, internal colonialism) will have more power to explain the actual dynamics in core-periphery development processes around the world.

The case of the TAR reminds us that the strategy of diffusing or introducing the social and economic systems of the "core" into the periphery (which has had very different social, economic systems in the past, and has its own strong religious cultural tradition) might not be necessarily workable. Such a strategy of diffusing or introducing is too simple an approach fundamentally to transform a society in a short period of time. Apart from the reform of some fundamental regional political and economic systems, many other factors need be taken into account: for example, religious hierarchical systems that might strongly defend their internal authority, community networks based on kinship and clans that might lead to special loyalty, and ethnic groups with strong exclusive cultural and value norms that might lead to extreme conservatism or resistance to external penetration. The more cases we study, the more factors will be identified and the deeper will be our understanding.

The concept of national development suggested by Michael Hechter also needs further discussion. In his opinion, it "refers to those processes by which a state characterized by sectional, or otherwise competing economies, polities, and cultures, within a given territory, is transformed into a society composed of a single, all-pervasive, and in this sense 'national' economy, polity, and culture (Hechter, 1976: 17)." He assumed a transition process from a diversified pattern in economic, political and cultural aspects into a homogeneous monist pattern.

The changing process in the real world might not always follow this route. First, there might be different rates of transition economically, politically and culturally, even if they move in the same direction. Their changes are not synchronous, and might not reach the same level of homogeneity at the final stage. For example, there might be a monist and unified political system in both the core and peripheries, but economically it is more like a semi-homogeneous system among the core and

peripheries, while the aspect of culture might be quite diverse to an extent and for a period of time.

Secondly, diversity might exist for a long time but contribute no harm to national unity and development. The pattern of coexistence of "national unity-homogeneity" and "regional interest-diversity" may be closer to reality. On one hand, there is always regional variation in economic development and cultural characters. On the other hand, there is a common national interest shared by all regions and a unified political system holding the nation together. To tolerate regional variation and local interests while strengthening the national unity of common interests at the same time might build a more stable political structure and promote the economy of a nation. Based on his study of the history of ethnic relations in China, Professor Fei Xiaotong proposed a "pluralist-unity" framework to understand the ethnicity patterns in China. The "one nation, two systems" framework designed by the Chinese government for Hong Kong and Macao has had positive results in national political unification while maintaining differentials in ideology, economy, social system, and culture. That case also supports this point.

Theoretically, Michael Hechter believes that by reserving their unique cultural tradition, ethnic minorities will impede economic integration and the national modernization process. This opinion actually opposes the idea of cultural diversity and is close to the melting-pot theory popular in the United States before the 1950s. Many scholars have questioned this theory and suggested a cultural-pluralism theory based on their studies in U.S. urban communities. They discovered that coexistence of various sub-cultural groups in the U.S. is an undeniable fact, and this circumstance fits the American principle of democracy and will benefit the U.S. politically, economically, and especially culturally (Gordon, 1964: 141–147).

Hechter agreed that there are sub-cultural groups in the United States but he thought that as an immigrant nation (different racial and ethnic groups have no traditional residential areas, no independent political and economic systems), the U.S. cannot be considered a typical model. Since there is no distinction between the core region and peripheries, ethnic relations in the U.S. and relevant theories may not be relevant for other nations (Hechter, 1976: 18). But his point does not support the melting-pot theory and cannot deny the meaning of cultural pluralism as a reference in other countries. For the division of core and peripheries, the urban communities and blocks where different racial and ethnic groups live in U.S. cities may also be considered different areas in space. The division and boundary of areas and region only have relative meanings in theoretical studies.

Since its founding in 1949, the Chinese government has continually encouraged respect and support for the traditional cultures of ethnic minorities. What has been the impact of this policy on cultural exchanges between the ethnic groups? Will this policy lead to promoting or impeding cultural integration among ethnic groups? Will cultural integration have a positive impact on the modernization of a multi-

ethnic nation? Will cultural pluralism bring economic prosperity to the peripheries and lead to national economic integration? All these issues have to be studied and answered in the future.

Professor Kazuko Tsurumi compared the popular modernization theory with what she called the endogenous development theory. She summarized several comparisons, which might provide some insights to us:

1. "The unit of modernization is the society as a whole, whose boundaries coincide with the nation-state. In contrast, the unit of endogenous development is the locale, an entity smaller and more limited than the nation-state, the localized network of village, town, and/or city communities, that share a common ecological setting (Tsurumi, 1992: 101–102)." Modernization theory represents "the centralized model of development, while endogenous development stands for the decentralization model" of national development.
2. The principal index of development in the modernization theory is economic growth in terms of GNP. In contrast, the essential measure of the endogenous development model is human development, "and economic development, important as it is, is only one condition for its realization."
3. "Ecological integrity and harmony with nature is a requirement for endogenous development, whereas environmental considerations are lacking in the theory of modernization."
4. The agents of modernization theory are the national political and industrializing elites. The agents of the endogenous development model are "the residents of local communities, whose creativity is essential for clarifying their goals and the course of regional development. This leads to multiple patterns of development, rather than the single model, as in the case of the theory of modernization."
5. "Modernization theory" believes that the traditions of pre-industrial society impede modernization process and must be replaced as soon as possible. The endogenous development model thinks that "pre-industrial legacies in the form of social structure, cultural and spiritual traditions and the forms of technology, are to be revived by the people as a means for rectifying and/or preventing the negative consequences of modernization."
6. The modernization theory came from the historical experiences of western European countries, which shared a common spiritual heritage (Christianity). The endogenous development model takes into account the experiences of "non-western countries with diverse spiritual legacies, such as Buddhism, Hinduism, Confucianism, Taoism, Islam, Animism and Shamanism, in addition to Christianity. Each religious faith stands for different views of nature, man-and-man and man-and-nature relationships (Tsurumi, 1992: 101–102)."

We may be enlightened somewhat in the Tibet case if we analyzed it with reference to the comparisons of modernization theory and the endogenous development model.

1. There are two levels of development: a national level and a regional level. When we deal with a big country with a large territory, a huge population, and various ethnic and religious groups, special attention should be given to regional development and we need to search for a diversified development model, instead of asking all regions and groups to follow one model of a single pattern of development. The unique characteristics of Tibet make its developmental model different from other regions of China.
2. In measuring development in Tibet, we cannot simply look at its GNP and economic efficiency. Attention should also be given to human development, access to modern education, sciences and technology and communication as well as ideas of nature, culture, economic activities and values. Because Tibetan Buddhism is deeply rooted in Tibetan society, it cannot simply be denied or replaced. Instead, we need to find the rational parts or spirit from this historical heritage, try to link them to modernization, to introduce new content and to rejuvenate them so they take on new forms. These measures will allow the adoption of historical heritage and continuing cultural confidence.
3. In designing a regional development plan (e.g. Tibet), apart from administrators, economists, technology experts, the opinions of representatives of local communities, scholars in social sciences and humanities as well as regional leaders should also be taken into account. Attention should center on human development and local characteristics and the balance between human society and the ecological environment.

Conclusion

From the discussion above, the basic characteristics of the relationship between the Tibet Autonomous Region and the Han regions, as well as the factors affecting these relations can be summarized as follows:

1. The geographic features of Tibet (mountains and high elevation) restricted trade, transportation, travel and migration between Tibet and other regions of China.
2. Before the 20th century, the administrative, social and economic relations between Tibet and the Han regions were limited. This was due mainly to significant differentials in social, economic and religious systems. The official function of the relationship was to maintain the subordination of Tibet to China. Trade with the Han regions was important for Tibet's economy and

consumption; urban and rural residents have also benefited from such trade to a different degree.

3. From 1911 to 1950, the estranged relationship between Tibetan authorities and the central government, along with the increasing influence of foreign governments in Tibet, had a strong negative impact on the administrative relationship, but not trade, between Tibet and the Han regions.
4. Monasteries were the dominant social organizations in Tibet before 1959. There was a theocracy. Monks made up a large proportion of the total population. They were very powerful economically and led the administration. Religious activities consumed most of Tibet's wealth in the past. After 1959 monasteries lost their power but, since the 1980s, the central government has permitted them to increase their influence again.
5. Since 1959 social and economic systems identical to that of other Han regions were introduced into the TAR. Although agricultural and pastoral production developed, productivity has been very low in the newly established state-owned enterprises. Under the conditions of the general low level of educational and economic development, the deficits of the TAR government increased rapidly accompanying the expansion of the TAR government and its institutions. Gradually, the finances of the TAR government became entirely dependent on aid from the central government. The dependent economy of the TAR became a new factor in the relationship between Tibet and the Han regions.

Relations between Tibet and the Han regions have been influenced by many factors, and have experienced many complications in the past. This chapter attempts to combine the information available on Tibet's economy before and after 1951, to define the basic economic patterns of Tibet and its changes, and to understand the Tibetan-Han relationship and the factors affecting this relationship.

In brief, there was a monastery economy based on serfdom in Tibet before 1959. After 1959 Tibetans obtained the same equal legal rights as the Han and other groups, and the political and economic systems of the Han regions were established in Tibet. But these systems did not work well and resulted in a dependent economy. There are common features between the monastery economy and the dependent economy before and after 1959. Both emphasize ideology and political interests as their priority. The transition between the two was realized by revolutionary land reform and a planned economy in China.

Internal colonialism has been widely criticized and the diffusion model seems to be the ideal model for national development. After reviewing the experiences of Tibet in the past several decades, the question that arises is: what is there beyond the diffusion model?

Chinese economic and management systems were planted into Tibet at a time when the objective conditions were not ready. Given the high dependency of its

economy, Tibet cannot be called a successful example of the diffusion model. It should be defined as a sub-model under Hechter's diffusion model in the development of the periphery. It can be called an example of a diffusing-reforming dependent model.

The Tibet case suggests that if social and economic systems and cultural traditions had been so different between the core and peripheral regions in the past, diffusing the core's socioeconomic systems into the periphery, at least as a short-term transitional alternative, might be a simplified strategy. Apart from system reform, other aspects such as cultural and economic traditions, religion and the knowledge of modern education and production, also need to be given sufficient attention.

7

Income and Consumption of Rural and Urban Residents in the Tibetan Autonomous Region

Income and consumption are among the most important indicators of people's economic lives. Four points are usually taken into account in the study of income and consumption. First, they should be studied together because the level of income affects — even determines — the patterns of consumption. Second, they need to be examined at both the micro and macro levels. Individual and family income (level, stability and sources) and consumption (structure, content and patterns of consumption) provide a basis for understanding a society. In addition, general income and consumption patterns (average level, stratification, and structures of income and consumption) of a nation, a region, a town, an ethnic group, or a social group should also be studied in order to see the larger economic context. Third, a dynamic and comparative point of view should be adopted to examine longitudinal changes and cross-sectional differentials. Income and consumption patterns change over time, accompanying the changes in the social and economic environment. Fourth, attention should be given to the various factors affecting the changes in people's income and consumption behavior, in order to understand the dynamics.

Urban and rural areas form quite different economic patterns or sectors in the process of industrialization and urbanization. Urban and rural areas sometimes are viewed as two types of economies and societies, and nations with differentiated rural and urban areas are sometimes characterized as having a "dualistic structure." In some studies the process of modernization is described as a process in which labor is transferred from traditional rural sectors into the industrialized urban sectors (Gersovitz, 1983). Other studies focus on the labor transfer between industries and view cities as growth poles of the modern economy (Simmons, 1981: 94). These theories on modernization and urbanization provide a framework for understanding the rural-urban differentials in the case of the TAR and its social changes over time.

Local statistical institutions were established in the TAR in the late 1950s and relevant publications became available only in the late 1980s. The first statistical yearbook of the TAR was published in 1989. It was not until the 1980s that Tibet

first became open to sociological researchers, allowing our sampling survey to be the first rigorous sociological study of Tibet.

A large proportion of our 1988 urban samples were the unemployed (38.5 percent); a small proportion worked in government institutions (33.2 percent). In contrast, the census data suggested that at least 57.8 percent of workers in the Lhasa Urban District[1] worked in government institutions. The difference reflects the different target populations included in our 1988 survey and the census. The issue of representation should be kept in mind when rural-urban differentials are discussed based on our survey data. Excluding "unit households (made up mostly of Han and Tibetan in-migrants)," the comparison between urban residents and rural residents in our sample will be a comparison between native and urban Tibetans.

Characteristics of Urban Development in the TAR

It will be helpful to discuss the basic conditions of urbanization and rural-urban patterns in the TAR before going on to analyze the survey data. According to the 1990 census, of a total of 72 counties in the TAR, 13 had a density of less than one person/km^2, 33 had a density between one and five persons/km^2, and only 13 counties had a density of more than 10 persons/ km^2.

Lhasa and Shigatse are the only cities in the TAR. Before 1959 there was a three-level administrative system under the *Kashag* government: *Kashag* (the Dalai Lama's government) — *Chikyap* (Jigyeb, or spyi-khyab in Latin) — *dzong* (an administrative unit similar to county in the Han region). In 1959 a five-level administrative system was adopted in the TAR as in other parts of China: autonomous region (province) — prefecture — county — district — *xiang* (Tanzen and Zhang Xiangming, 1991a: 344). In 1987 a policy of "abolishing districts and merging *xiang*" eliminated the "district level," leaving a four-level system mirroring the administrative composition all over China. This administrative adjustment stimulated the development of towns so that since 1988 the total number of towns has increased from nine to 31.

In general, the rate of urbanization in the TAR has been slower than the national average and other western regions in China. From 1964 to 1982, for example, the urban population increased 52.6 percent in the TAR in comparison to 62.5 percent for the whole of China. The rate of urbanization has, however, increased in recent years. The population living in cities and towns in the TAR together made up 19.4 percent of the total in 2000, still lower than the national level (39.1 percent) and that for nearby regions (33.8 percent in Xinjiang, 21.7 percent in Qinghai and 24.0 percent in Gansu).

It bears mentioning that in both national and TAR statistics of urban population, suburban farmers within the administrative boundaries of the cities and towns were

included. In 1985 there was a total urban population of 100,000 in the nine cities and towns in the TAR, and 22.7 percent of these people were "agricultural" residents. Since some *xiang* became towns in 1988, the percentage of "non-agricultural" residents has fallen. In 1990, of a total population of 357,000 urban residents in the TAR, only 52.9 percent were "non-agricultural" residents.[2]

In the TAR there is a large percentage of non-agricultural residents who actually do not live in urban areas. Many government employees working in rural administration, post offices, schools and clinics are registered as non-agricultural residents, as are their family members. In 1990 of the total 300,000 non-agricultural residents in the TAR, 189,000 (40 percent) did not live in cities and towns. Among the total urban residents (357,000) in the TAR, 168,000 (47 percent) were registered as agricultural residents. The general understanding of the urban category is that non-agricultural residents should live in urban areas and peasants should live in rural areas. The departure from tradition in the urban classification in the TAR is an interesting issue reflecting some characteristics of the Chinese registration system.

It is possible that the practice of classifying urban population and non-agricultural residents in the TAR is different from other regions in China. Among the 31 towns in the TAR in 1990, five did not have a single registered non-agricultural resident; in six towns the non-agricultural residents numbered fewer than 100 (SBT, 1991: 7,130). It would be impossible to find such statistical patterns in the Han regions because the government requires at least a non-agricultural population of 2,000 for a *xiang* to be recognized officially as a town (Ma Rong, 1990b). It can be assumed that assignment of non-agricultural status has been seriously restricted in the TAR and that some "rural residents" live in towns and take care of day-to-day operations (administrative, technical and management) but cannot change their status; those functions are usually assigned to "non-agricultural" residents in other regions.

There are a large number of temporary and circular migrants in the TAR from Han regions and other Tibetan areas. According to official estimates, they made up more than 50 percent of the total number of permanent residents (120,000) in Lhasa in June of 1985 (*Almanac of China's Population*, 1985: 280). The comparable percentage in other Chinese cities is usually below 20 or 30 percent. Under the reform policies, all cities in China offer temporary migrants opportunities. Because the population sizes of cities and towns in the TAR are relatively small, a certain number of in-migrants may have a much stronger impact on the economy and daily life of the urban community than in cities elsewhere.

The Basic Situation of Households Interviewed in the 1988 Survey

The basic background information of the 1,300 interviewed household heads in the 1988 survey is introduced in Table 7.1. First, native Tibetans are the majority

among both urban and rural respondents. In the survey, a group of Hui households in the Wapaling Residential Committee were selected. Most of the Hui who live here speak Tibetan but maintain their Muslim religion and built a small mosque in the neighborhood.

Table 7.1. The Basic Situation of Interviewed Household Heads (1988)

Basic situation of Household head		**Lhasa**		**Counties**	
		Households	%	Households	%
Ethnic Status	Han	1	0.1	7	1.1
	Tibetan	617	97.8	631	98.9
	Hui	13	2.1	0	0.0
	Total	631	100.0	638	100.0
Gender	Male	247	39.2	479	75.3
	Female	383	60.8	157	24.7
	Total	630	100.0	636	100.0
Age	Average age	52.8	-	43.8	-
Residential Registration	Urban	618	98.9	24	3.9
	Agricultural	8	1.1	562	91.2
	Pastoral	0	0.0	30	4.9
	Total	626	100.0	616	100.0
Religious Belief	Gelugpa	575	91.3	336	52.9
	Nyingma	5	0.8	33	5.2
	Kargyu	1	0.1	26	4.1
	Sakya	1	0.1	137	21.6
	Bon	4	0.6	0	0.0
	Islam	13	2.1	26	4.1
	Others	1	0.1	1	0.1
	No religion	30	4.8	76	12.0
	Total	630	100.0	635	100.0
Education	Illiterate	402	65.2	423	67.4
	Primary	170	27.6	192	30.6
	Junior Mid. Sch.	34	5.5	13	2.0
	High school	5	0.8	0	0.0
	Prof. High sch.	4	0.6	0	0.0
	College/univ.	2	0.3	0	0.0
	Total	617	100.0	628	100.0
Years in school	Average years	1.09	-	0.86	-
Place of Birth	In the county	298	45.2	529	83.2
	In the prefecture	104	15.8	86	13.5
	In the TAR	202	30.6	19	3.0
	Other province	25	8.4	2	0.3
	Total	629	100.0	636	100.0

* Some total numbers are different from total households because not all questions were answered.

The average age of Lhasa household heads was nine years older than that of rural household heads. Owing to better health care and more stable incomes in cities, the life expectancy of Lhasa City residents was about six years higher than that of rural residents. This might be the first reason that explains the difference. The second reason is that some old farmers moved to live with relatives in Lhasa for the sake of convenient pilgrimages to monasteries. The third is that in rural areas young couples usually establish their own households soon after marriage, whereas in urban areas many young married couples live with parents for a longer time because of a housing shortage. Another characteristic of Lhasa residents is the high percentage of female household heads (60.8 percent), compared with rural areas (24.7 percent).

Because our 1988 survey clearly distinguished between "rural" (village) and "urban" (neighborhood) in the household selection procedure, the category of "rural-urban" was nearly identical with the "agricultural" and "non-agricultural" registration status. Only 1.1 percent of the Lhasa respondents was found to hold an agricultural registration. Meanwhile, we found 24 "non-agricultural" residents in the 24 *xiang* we surveyed; one in each. This might have been a coincidence. Because this survey was designed to focus on ordinary farmers for rural-urban comparisons, government employees in villages were generally excluded in the sampling.

Approximately 83.2 percent of rural respondents continued to live in the same counties in which they were born. For the respondents interviewed in old urban areas of Lhasa, 47.4 percent were born in urban Lhasa, 15.8 percent in nearby counties within Lhasa City, 32.1 percent in other prefectures of the TAR and four percent in other provinces. Lhasa residents had a higher geographic mobility and their travel covered a greater distance.

Except for the above-mentioned Hui, the *Gelugpa* sect is the dominant religious group among Lhasa Tibetan residents. In contrast, only 52.9 percent of the rural respondents were adherents of the *Gelugpa* sect; the rest were attached to other Tibetan Buddhist sects.

It is often assumed that, in general, rural residents, having less formal education, are apt to be more religious. At the same time, it is assumed that urban residents, who usually have more formal education, are more knowledgeable about science and technology and, subject to more government propaganda, are apt to be less religious. Our survey found otherwise. The data suggested that 12 percent of rural respondents did not believe in any religion; the percentage in Lhasa was only 4.8 percent. We do not know whether this difference was the result of varying interpretations of the question asked during the interviews.

Educational facilities in urban areas are usually better than those in rural areas. In our survey we found that there was not much difference in literacy rates between rural and urban respondents, even though we found, in our rural survey, not one high school graduate and an average school enrollment of less than one

year. In contrast, 7.2 percent of Lhasa respondents completed at least junior middle school. If the age factor is taken into account (Lhasa respondents were nine years older than rural respondents), the percentage of illiterates in Lhasa should be lower than in rural areas.

Forty-one percent of Lhasa respondents were government employees. Only 1.4 percent of rural respondents were government employees. Trades and services are more highly developed in Lhasa, so 15.6 percent of Lhasa respondents reported their occupation as "self-employed" compared with only 4.4 percent who did so in rural areas. As will be discussed later, the "unemployed" residents still have some income (averaging 855 yuan per capita in 1987) and they were actually engaged in their own small services or other business. Accompanying the rapid development of tourism in Tibet, the percentage of the self-employed should be much higher in Lhasa than 20 years ago.

Income of Rural and Urban Residents

Our 1988 survey in the old urban area of Lhasa suggested that the annual per capita income was about 1,000 yuan on average in 1987 compared with rural residents' income (560 yuan). The Urban Investigative Team of the Statistical Bureau of the TAR (SBT) also took a survey of their "informant households" (the same 100 urban households every year since the 1980s), and reported a per capita annual income of 1,443 yuan for urban residents and 468 yuan for rural residents in 1988. Our 1988 survey did not cover unit households, and this difference may indirectly reflect the disparity between the two surveys because unit households earn 50 percent more than old urban area residents on average.

The rural-urban income difference in the TAR used to be larger than the national average, even almost double in 1983. Recently the rural-urban income gap has increased rapidly in many regions. Even where there were many new welfare programs in cities such as for those enforcing "the lowest income standards" and "the lowest income security program" in most cities to help the poor, the rich people in cities increased significantly due to the growth of new industry, stock markets, and housing prices. That led to an increase in the national average rural-urban income gap, which, since 2004, has even exceeded that in the TAR. It is possible that such welfare programs have not been implemented in the TAR in time. Before 2002, the average urban income in the TAR was usually higher than the national average (7,762 yuan vs. 7,703 yuan in 2002), but became significantly lower after 2004. Rural income in the TAR since 1990 has been lower than the national average. These dynamics deserve special attention because it helps to illuminate urban and rural development in the TAR.

Table 7.2. Rural-Urban Per Capita Annual Income Differential in the TAR and China (1980–2008)

Year	The TAR			All China			Rural-urban diff.
	Urban*	Rural**	Difference	Urban*	Rural**	Difference	of TAR/China
1980	683	274	409	478	191	287	1.43
1981	715	296	419	500	223	277	1.51
1983	840	318	522	573	310	263	1.98
1985	984	535	449	749	397	352	1.28
1987	1229	519	710	1012	463	549	1.29
1990	1613	582	1021	1510	686	824	1.24
1991	1995	617	1378	1701	709	992	1.39
1992	2083	653	1430	2027	784	1243	1.15
1993	2348	706	1642	2577	922	1655	0.99
1994	3330	817	2513	3496	1221	2275	1.10
1995	4000	878	3122	4283	1578	2705	1.15
1996	5030	975	4055	4839	1926	2913	1.39
1997	5135	1085	4050	5160	2090	3070	1.32
1998	5439	1158	4281	5425	2162	3263	1.31
1999	5998	1258	4740	5854	2210	3644	1.30
2000	6448	1331	5117	6280	2253	4027	1.27
2001	7119	1404	5715	6860	2366	4494	1.27
2002	7762	1521	6241	7703	2476	5227	1.19
2003	8058	1691	6367	8472	2622	5850	1.09
2004	8200	1861	6339	9422	2936	6486	0.98
2005	8411	2078	6333	10493	3255	7238	0.87
2006	8941	2435	6506	11760	3587	8173	0.80
2007	11131	2788	8343	13786	4140	9646	0.86
2008	12482	3176	9306	15781	4761	11020	0.84

* "Urban": Annual disposable income of urban residential households per capita;
** "Rural": Annual net/disposable income of rural residential households per capita.
Sources: SBT, 2007: 106; 2009: 319. SBC, 1988: 809,823; 1995: 262, 279; 2009: 345.

The rural-urban income difference, on average, does not reveal the income distribution patterns within rural and urban residents as two separate groups. Among the interviewed households in Lhasa, 2.4 percent reported that they had no income at all. Another 1.3 percent of respondents reported their per-capita annual income exceeded 5,000 yuan in 1987. The Urban Investigative Team of the SBT reported that poor households had an average income of 789 yuan with the highest income of 2,813 yuan. Our survey sampled more than 600 households in the old urban area of Lhasa. The Investigative Team covered only 100 households in both "unit households" residents and "residential households." I personally interviewed some households "without income" and some households with an income that exceeded 20,000 yuan.[3] At least for old urban area residents, the coverage of our 1988 survey was wider than that of the statistical bureaus.

The distribution of per capita annual income from our 1988 survey is presented in Table 7.3. It demonstrates that the largest clusters in urban Lhasa were the eight groups with an income between 201 yuan and 1,000 yuan, each comprising more than five percent of the total. These eight groups together comprised 60.8 percent of the total respondents in Lhasa. The larger clusters in the rural areas were the seven groups that made between 101 yuan and 800 yuan. These seven constituted 79.2 percent of the rural respondents.

In Lhasa, 14.2 percent of respondents had an income above 1,500 yuan. Only 3.5 percent in rural areas reached that level. Seven percent of Lhasa respondents had an income below 100 yuan; the corresponding figure among their rural counterparts was only 3.2 percent. Ten percent of Lhasa respondents had an income above 1,800 yuan compared with only 1.3 percent in the rural areas. In general, the income gap between urban and rural residents is obvious, and the income gap between urban residents themselves was wider than that between urban and rural residents. Considering the unit households have an even higher income than that of old urban area residents in our survey, the rural-urban income gap would appear to be more serious.

Some Western scholars have also found a similar poor-rich income gap in pastoral areas. In the *Pala* area of Angren (Ngamring) County, "no households had less than 37 animals per person in 1981 (when the communes dissolved and the 'household responsibility system' came into practice), 38 percent had less than 30 in 1988. The richer 16 percent of the population in 1988 owned 33 percent of the animals while the poorer 33 percent of the population owned only 17 percent of the *Pala* animals (Goldstein and Bell, 1990: 166)." These "new poor" maintain their lives by working for the rich. But, in general, "all nomads reported that economic life is much better these days than during the commune period when people often went hungry. The main reason for this is the absence of taxes and the increase in the value of products used in nomadic lifestyles. Also important is the great demand for laborers in *Pala* and the relatively high wages being paid there. It is also noteworthy that welfare is preventing complete destitution for a number of families . . . Many (nomads) have built new store houses, and a few even new residences, costly investments since wood for the beams and pillars has to be brought from hundreds of miles away (Goldstein and Bell, 1990: 171, 162)."

Now the income differentials of rural and urban residents and the ownership of their work units will be discussed for occupational groups. For residents in the old urban area of Lhasa, the group with the highest per capita income was "cadre" (1,362 yuan), while the income of cadres working in state-owned institutions was higher than those working in collective enterprises (1,384 yuan vs. 1,240 yuan) (Table 7.4). It was the reverse in rural areas, although cadre was still the highest income occupation with the cadres working in collective enterprises in rural areas earning more than cadres working for government institutions in both rural areas

Table 7.3. Annual Per Capita Income of Interviewed Households in 1987

Income per Capita (yuan)	Lhasa			Counties		
	Households	%	Cumulative %	Households	%	Cumulative %
No income	13	2.4	2.4	4	0.6	0.6
0–50	8	1.5	3.9	2	0.3	0.9
51–100	16	3.0	6.9	15	2.3	3.2
101–200	26	4.9	11.8	70	10.6	13.8
201–300	41	7.7	19.5	94	14.2	28.0
301–400	37	6.9	26.4	101	15.3	43.3
401–500	45	8.4	34.8	93	14.1	57.4
501–600	59	11.1	45.9	70	10.6	68.0
601–700	28	5.3	51.2	54	8.2	76.2
701–800	40	7.5	58.7	41	6.2	82.4
801–900	44	8.3	67.0	18	2.7	85.1
901–1000	30	5.6	72.6	27	4.1	89.2
1001–1100	20	3.7	76.3	16	2.4	91.6
1101–1200	16	3.0	79.3	10	1.5	93.1
1201–1300	9	1.7	81.0	9	1.4	94.5
1301–1400	14	2.6	83.6	10	1.5	96.0
1401–1500	11	2.1	85.7	3	0.5	96.5
1501–1600	12	2.3	88.0	7	1.1	97.6
1601–1700	8	1.5	89.5	3	0.5	98.1
1701–1800	6	1.1	90.6	2	0.3	98.4
1801–1900	3	0.6	91.2	2	0.3	98.7
1901–2000	7	1.3	92.5	1	0.1	98.9
2001–3000	23	4.3	96.8	6	0.9	99.7
3001–4000	7	1.3	98.1	1	0.1	99.8
4001–5000	3	0.6	98.7	0	0.0	99.8
> 5000	7	1.3	100.0	1	0.1	100.0
Total above	533	100.0		660	100.0	
Unknown	111			8		
Total interviewed	644			668		

and Lhasa (1,422 yuan vs. 974 yuan and 1,240 yuan). This indicates that collective enterprises at the township/village level are quite active and produce higher profits. With more flexible income distribution policies, the cadres working in these enterprises earned a higher income. Since the fourth Tibet Work Conference (2001), the central government has had a new policy to provide to those working in the TAR salaries two-and-a-half times higher than for those working in other areas. It was said that this new policy raised the income levels of the government employees in the TAR significantly and provoked many complaints from Tibetan cadres in Qinghai and Sichuan.

"Professionals (this term usually refers to those with a college education or above and have a job needs some professional skills)" in Lhasa also earned a relatively high income (1,218 yuan on average). This finding is important because professionals in other parts of China usually earn less than many other groups in the 1980s. It is hoped that the advantages professionals enjoy in the TAR will encourage them to contribute more to the TAR's economic development.

Monks accounted for the largest rural-urban income gap within the same occupation. Three monks interviewed in Lhasa reported their income at 1,149 yuan while a rural monk reported only a 148 yuan income. Monks in Lhasa benefit from the fact that pilgrims and tourists donate generously and they are the recipients of government subsidies. In contrast, rural monks have limited sources for donations. Monks in Lhasa earn much more today because of large donations from tourists.

Those who were self-employed (restaurants, stores, handicrafts, repairing services, etc.) also found Lhasa an attractive place. The 78 self-employed respondents we interviewed in Lhasa reported an income of 1,132 yuan on average, almost twice that earned by self-employed people in rural areas. Private businesses developed very fast in the TAR, from 20,250 households with licenses (5,746 came from other provinces, comprising 28.4 percent of the total) in 1984 to 39,129 households in 1988 (11,884, or 30.4 percent, of them from other provinces). The work force engaged in these private businesses increased from 24,404 employees to 51,477 during the same period.

Since 1951, 1970 was the year with the fewest self-employed entrepreneurs in the Lhasa Urban District (only 95 households). These enterprises employed 14,743 workers in 1992 (Gelek and Jin Xisheng, 1995: 423–424). A research study reported that self-employed workers earned about 2,400 yuan on average (per laborer, not per capita of households), and in 1989 "58 self-employed households had an income of 7,280 yuan on average in urban Lhasa (Zhuang Yongfu, 1990: 15)." The speed of development of private business in Lhasa is relatively higher than that in other cities. Among private entrepreneurs, the percentage of temporary migrants from other provinces was also relatively higher in Lhasa compared with other Chinese cities.

The 1988 survey did not find anyone who fit the categories of "professional" or "retired (government employees)" in rural-area samples. This reflects the lack of technicians in rural TAR. Without the participation of technicians, the process of agricultural modernization in the TAR is bound to be slow. Retired cadres and workers usually live in Lhasa and county towns, rather than in villages. The average income of retired individuals in Lhasa was higher than that of workers but lower than that of the government officials, the cadres.

Peasants in the old urban area of Lhasa earned a higher income than service workers and workers, especially those in private business. These peasants kept an agricultural registration status but were engaged in various businesses in urban Lhasa. Among workers in Lhasa, those working in state-owned enterprises earned

Table 7.4. Average Income of Laborers by Occupation and Unit Ownership (1987)

Occupation	Ownership Of work unit	Lhasa			Counties		
		Household	%	Average income	Household	%	Average income
Worker	United families	24		571	0		-
	Collective	40		914	4		364
	State-owned	54		1,021	2		696
	Total	123	24.6	880	6	0.9	475
Cadre	Collective	6		1,240	2		1,422
	State owned	34		1,384	1		974
	Total	40	8.0	1,362	3	0.5	1,273
Professional	Collective	1		740	-		-
	State owned	2		1,457	-		-
	Total	3	0.6	1,218	-	0.0	-
Service Worker	Collective	7		707	0		-
	State owned	7		1,017	1		402
	Total	14	2.8	862	1	0.2	402
Retired worker	United families	2		1,613	-		-
	Collective	8		1,176	-		-
	State-owned	29		1,009	-		-
	Total	39	7.8	1,074	-	0.0	-
Peasant	Private	4		1,261	540		569
	United families	2		637	1		370
	Collective	2		890	38		362
	Total	8	1.6	1,012	579	88.1	555
Herdsman	Private	-		-	32		430
	United families	-		-	0		-
	Collective	-		-	0		-
	Total	-	0.0	-	32	4.9	430
Self-employed	Private	78	15.6	1,132	29	4.4	683
Monk	-	3	0.6	1,149	1	0.2	148
Unemployed	-	193	38.5	855	6	0.9	944
Total		501*	100.0	968	657*	100.0	560

* Some interviewed household heads did not report the ownership of their work units.

more (1,021 yuan), while those in collective enterprises earned less (914 yuan), and those in "united household enterprises" (where several families jointly establish enterprises) earned the lowest (571 yuan). Workers working for state-owned enterprises in rural areas (usually in power stations, irrigation systems or highway

maintenance) earned a higher income than those in collective enterprises, but it was still only about 68 percent of that of state-owned workers in Lhasa.

Differing from private businesses, industrial enterprises managed by collective or united households were still not really developed and their profits were quite limited in the TAR. This marked a big difference between the TAR and coastal areas where township/village enterprises played an important role in the development of the local economy in the 1980s and 1990s.

In the TAR state-owned enterprises rely on central government grants. Their employees have higher wages and subsidies than their counterparts in other provinces. Collective or united household enterprises were supported and managed by local governments or communities with limited financial resources. Their efficiency was low and they produced lower profits. Self-employed private enterprise owners are mainly engaged in trade, restaurants, transportation and services for the distribution of consumer goods, not for production. If this economic pattern continues the economy of the TAR cannot really develop.

From our research in several regions in Inner Mongolia we discovered that the income of herdsmen is usually higher than that of peasants and we assumed this would be true elsewhere. However, in Tibet, according to our 1988 survey, we discovered that herdsmen's income was 430 yuan, lower than peasants' 555 yuan. Because the pastoral-area sample size was small (30 households), it was possible that the sample was selected from a relatively poor area. Tradition among Tibetan herdsmen is to keep their herds as large as possible as a demonstration of their wealth. They only sell animals when they need cash. In general, the prices of pastoral products in the TAR were lower than those in other regions of China. The cost of transportation in the TAR is much higher than in other regions. But the local administration tries to control trade and buy products at low prices, and herdsmen are reluctant to travel long distances to reach free markets that would afford them better prices for their products (Goldstein and Bell, 1990: 162). Population and market densities are very, very low in pastoral areas of the TAR. The markets for pastoral products, price regulations and their impact on herdsmen's income in the TAR need further study.

We will now discuss the changes in peasants' income since the household responsibility system was introduced in the TAR. The lands assigned to individual peasant households by contract in 1988 are presented in Table 7.5. Our survey found that 53 rural households (9.1 percent of the total) had contracted land of less than 1 *mu* (0.1647 acres) per person. The majority (82.8 percent) of our rural respondents had land between 1 *mu* and 5 *mu* (0.1646 acres and 0.8235 acres). On average, Tibetan farmers had 0.436 acres per household member or 2.2 acres for a five-member household. Goldstein's survey in 13 villages reported similar land holding data: 3.3 *mu* and 2.7 *mu* per capita on average in 1981 and 1997 respectively (Goldstein, et al. 2006: 206).

Table 7.5. Contracted Land of Interviewed Households (1988)

Contracted cultivated land		Households	%	Accum. %
Counties	Did not get contract	10	1.7	1.7
	Less than 1 *mu*	43	7.4	9.1
	1.1–1.5 *mu*	80	13.8	22.9
	1.6–2.0 *mu*	105	18.0	40.9
	2.1–2.5 *mu*	69	11.9	52.8
	2.6–3.0 *mu*	86	14.8	67.6
	3.1–3.5 *mu*	51	8.8	76.4
	3.6–4.0 *mu*	52	8.9	85.3
	4.1–4.5 *mu*	23	4.0	89.3
	4.6–5.0 *mu*	16	2.7	92.0
	5.1–6.0 *mu*	21	3.6	95.6
	6.1–7.0 *mu*	13	2.2	97.8
	7.1–10.0 *mu*	11	1.9	99.7
	> 10.0 *mu*	2	0.3	100.0
	Total	582	100.0	
Lhasa	Did not get contract	564	87.6	87.6
	Less than 1 *mu*	74	11.5	99.1
	1.1–2.0 *mu*	6	0.9	100.0
	Total	644	100.0	

* 1 *mu* = 0.1674 Acre.

There were 10 rural households with no contracted land (1.7 percent of the total). These were workers engaged in collective enterprises owned and managed by the local community. Since they were offered this opportunity, they gave up their rights to land distribution and contracting. In contrast, 80 households in the old urban area of Lhasa claimed to have contracted lands. The land they left in their home villages were being cared for by relatives or rented to other farmers. Their motivation for keeping the land in their names was the prospect of acquiring some benefit from it rather than any hopes of returning and working the land themselves. The 12.4 percent of Lhasa residents in the old urban area who still held on to their contracted land suggests that they maintained a close relationship with the rural community. In most cases, a person who changes residential registration from a village to a town/city automatically loses the right to contract land in their village. Keep in mind that our survey in Lhasa covered only formal permanent urban residents, not temporary migrants. Lhasa's case is unique in China.

Grain productivity is a key indicator of peasant income in many parts of China, especially in regions where grain production is the dominant agricultural activity. A total of 87.1 percent of the 550,098 acres of cultivated land in the TAR in 1994 was sowed for grain production. Grain production of the interviewed rural households in 1987 is presented in Table 7.6. Households with an output between 75 kg/*mu*

and 225 kg/*mu* comprised 68.4 percent of the total. Households with an output of less than 75 kg/*mu* comprised 15.1 percent while those that exceeded 225 kg/*mu* tallied 16.5 percent. Grain production on average for all respondents was 156 kg/*mu*. If calculated at 2.65 *mu* per person on average in the TAR, grain production was 414 kg per person in 1987. According to the consumption standard throughout China, domestically produced grain in the TAR should be able to support the local population. But grain production in 1987, according to the Statistical Bureau of the TAR, was only 82 kg/*mu* (SBT, 1991: 170), about half that in our survey.

Table 7.6. Grain Productivity of Interviewed Rural Households (1987)

Kg/mu	Kg/acre	Household	%	Accum. %
< 25	< 4.2	24	4.2	4.2
25–50	4.2–8.2	22	3.8	8.0
51–75	8.3–12.3	41	7.1	15.1
76–100	12.4–16.4	67	11.6	26.7
101–125	16.5–20.6	79	13.7	40.4
126–150	20.7–24.7	84	14.6	55.0
151–175	24.7–28.8	43	7.5	62.5
176–200	28.9–32.9	54	9.4	71.9
201–225	33.0–37.0	67	11.6	83.5
226–250	37.1–41.2	25	4.3	87.8
251–275	41.3–45.3	18	3.1	91.0
276–300	45.4–49.4	20	3.5	94.5
301–325	49.5–53.5	10	1.7	96.3
326–350	53.6–57.6	10	1.7	98.0
351–375	57.7–61.7	4	0.7	98.7
376–400	61.8–65.9	6	1.0	99.7
401–425	66.0–70.0	2	0.3	100.0
Total	Total	576*	100.0	

* The productivity of 92 households is unknown.

Because our survey questions were selected through a carefully designed sampling procedure, the result is assumed to be highly representative. But since the areas covered in our survey were three major grain producing prefectures (Lhasa, Shigatse and Lhoka), the grain productivity in these areas should be high in comparison to the region as a whole. Another possible reason for our survey finding higher numbers in grain productivity is that the peasants may have under-reported production to government statistical officials and provided more reliable numbers

for our survey. The rationale for under-reporting production to the government is simple: it enabled the peasants to pay lower fees to the local administrations and communities and allowed them to receive more welfare since welfare is calculated by income level. All over China, farmers are never ashamed to report their "poverty" to the government. Many county governments have tried very hard through back-door means to have their county recognized as a "state-level poverty county" so as to receive financial subsidies and other benefits from the central government. In contrast, the peasants had nothing to gain or lose by reporting their real production for our independent academic survey. Therefore, our data for production, at least for these three prefectures, might be more accurate than the government data.

Table 7.7 shows the dates when the new household responsibility system was started for the interviewed rural households in various locations. It is obvious from the chart that 1981 and 1982 were the years in which the TAR government was actively implementing the new system, with 1980 a period of experimentation since only 9.4 percent of our rural respondents were incorporated into the system in that year. The transition to the new system in rural TAR was largely completed by 1984; by that year 98 percent of households had been incorporated into the system. This process took longer compared with other regions, where it mostly ended before 1983.

Table 7.7. Date of Household Responsibility System in Practice for Interviewed Households

Year of implementation	Household	%	Accum. %
1980	62	9.4	9.4
1981	235	35.6	45.0
1982	164	24.9	69.9
1983	58	8.8	78.7
1984	127	19.3	98.7
1985	12	2.0	100.0
Total	659*	100.0	

* The dates of land reform for nine households are unknown.

What changes has the new system brought to rural areas in the TAR? Table 7.8 compares the per capita income of interviewed households before and after the year when the new system was implemented in their villages. Respondents were asked about their incomes for both the year before they made the transition and their first year under the new system. For example, if the village joined the new system in the spring of 1982, the farmers were asked about their incomes in 1981 and 1982.

Table 7.8. Income Changes of Interviewed Rural Households by System Reform

Comparison between the income in the year after the new system and that of a year before		Household	%	Accum. %
Increase (yuan)	1–50	38	8.0	8.0
	51–100	43	9.1	17.1
	101–150	36	7.6	24.6
	151–200	32	6.7	31.4
	201–250	37	7.8	39.1
	251–300	30	6.3	45.5
	301–350	29	6.1	51.6
	351–400	28	5.9	57.5
	401–450	28	5.9	63.3
	451–500	26	5.5	68.8
	501–550	18	3.8	72.6
	551–600	17	3.6	76.2
	601–700	35	7.4	83.6
	701–800	14	2.9	86.5
	801–1000	37	7.8	94.3
	> 1000	27	5.7	100.0
	Subtotal	475*	100.0	
Decrease (yuan)	1–50	27	28.7	28.7
	51–100	13	13.8	42.6
	101–150	16	17.0	59.6
	151–200	12	12.8	72.3
	201–250	10	10.6	83.0
	251–300	3	3.2	86.2
	301–350	2	2.1	88.3
	351–400	3	3.2	91.5
	401–450	1	1.1	92.6
	451–500	2	2.1	94.7
	701–800	2	3.2	97.9
	> 1000	2	2.1	100.0
	Subtotal	94	100.0	

* Income changes for 99 households are unknown.

The new system in most cases was implemented in late winter or early spring before the sowing season. During the implementation period, land and animals were carefully counted, and community members who had rights to a share of community property were carefully identified. Then all community property was distributed equally among eligible recipients. Community members had to resolve disputes about the distribution of land. The evaluation of each piece of land by its location, fertility and size had to be accepted by the majority before distribution. Long discussions were required before an agreement could be reached.

About 83.5 percent of rural respondents claimed that their income increased after reform and 16.5 percent reported a decline. It should not be surprising that a small proportion of peasants had a bad year owing to various natural reasons (rainfall, flood, drought, windstorm, hailstorm, or even illness that could have kept an individual from being able to work). It is confirmed that a majority of peasants did improve their income, with some (26 percent of the total) realizing an increase of 500 yuan compared with the pre-distribution income. This was a significant sum in 1987.

Among the 94 respondent households that reported an income decline, only 16 experienced a decline above 250 yuan while 56 households had an income decline below 150 yuan. Therefore, the percentage of rural households that seriously reduced their income in the year after the decollectivization, and the amounts they lost, were limited.[4] Western scholars also observed income improvement after system reform in rural Tibet. "The impact of these reforms on farmers' standard of living is almost universally perceived by villages to be positive: 94 percent of all 780 households felt their livelihood had improved since decollectivization (Goldstein, et al, 2006: 198)."

The structure of income, to a certain extent, indicates the occupational background of residents as well as the economic structure of the local community (Table 7.9). About 44.8 percent of urban respondents had no salary income in 1987. In other words, about half of the residents in the old urban area of Lhasa had nothing to do with the government and its institutions (including state-owned enterprises and government-managed collective enterprises). These residents therefore were little affected by any changes in government regulations of salary and subsidies. Among the 55.2 percent of respondents with salary incomes, the percentages of their salary as part of their total incomes varied greatly. Only 15.9 percent of respondents relied entirely on salary income. About 39.5 percent of the respondents in the old urban area of Lhasa saw the percentage of their salary surpass 70 percent of their total income. In the old urban district more than 60 percent of residents relied primarily on income other than their government-related salary. This is also very unusual in Chinese cities, where the percentage of residents who relied mainly on government salaries was 70 to 85 percent in the 1980s if temporary migrants are excluded.

It can safely be assumed that in the new urban areas of Lhasa almost all the households that can be characterized as unit households make their living largely through salaries. Accordingly we can divide the city into two separate geographic zones where we have salary earners and non-salary earners, distinguishing Lhasa from other cities in China in the 1980s. This is one important finding of this survey.

There were 91.2 percent of rural respondents who had no salary income. This finding corresponds to the occupational structure discussed above. About 1.4 percent of rural respondents reported their occupations as either state-owned or collective-enterprise workers earning a salary. The other non-salaried occupations (monks, self-employed private tradesmen and the "unemployed") together constituted 5.5 percent. Some peasants/herdsmen might have earned some salary in addition to agricultural income. A high proportion of the rural population still derives its income from agricultural production, indicating very little manufacturing (food processing), trade and services in rural Tibet.

Although 31 percent of Lhasa respondents in 1987 reported that they received "subsidies and award/bonuses," these funds only made up a small proportion of their incomes, with only 14.1 percent of total respondents in Lhasa claiming a sum exceeding 20 percent of their total income. Subsidies and bonus/awards are beyond regular salaries and may be extended to non-government employees as social welfare, poverty alleviation grants, reimbursement for damages in the Cultural Revolution, etc. The money did have some impact on people's incomes, but only one percent of the residents (those whose extra income was above 60 percent of their total income) were able really to live on it.

Subsidies/bonuses/awards had even less of an impact on the incomes of rural residents. Only one percent of rural respondents received enough of these funds to exceed 20 percent of their total incomes. In contrast, pastoral incomes were essential parts of their livelihoods. About 16.1 percent of rural respondents claimed no pastoral income, with 6.8 percent reporting their pastoral income above 50 percent of their total income (including 4.9 percent respondents who lived in pastoral areas). In general, pastoral income is an important part of peasants' earnings.

Handicrafts are also significant for many peasants, with 25.7 percent reporting some income from it. In contrast, only eight percent of Lhasa respondents had income from this source. But the percentage of Lhasa residents who lived on income from handicrafts (above 50 percent of their total revenue) was higher than that in rural areas (6.4 percent vs. 3.4 percent). The income from trade at local fairs was important to 11.6 percent of Lhasa respondents (accounting for more than 50 percent in their total income) compared with only 1.1 percent of rural respondents. About 20 percent of the residents in the old urban area of Lhasa earned their living through handicrafts and trade (peddlers). They formed a significantly large social group.

As self-employed people, their incomes were unstable and their businesses were subject to taxation. They were outside the economic activities established

Table 7.9. Income Structure of Interviewed Households (1987)

% in income	**Salary**		**Subsidies**		**Farming**		**Herding**		**Forestry**	
	Lhasa	County	Lhasa	County	Lhasa	County	Lhasa	County	Lhasa	County
0	44.8	91.1	69.0	94.1	98.7	7.6	100.0	16.1	99.4	80.5
0.01–0.10	5.4	5.3	14.1	3.3	0.2	12.9	0.0	43.1	0.2	14.3
0.11–0.20	1.3	0.5	9.4	1.7	0.0	5.7	0.0	14.3	0.0	2.6
0.21–0.30	1.0	0.3	3.6	0.5	0.0	7.9	0.0	11.6	0.0	0.8
0.31–0.40	1.5	0.3	1.5	0.3	0.0	8.5	0.0	5.8	0.0	0.6
0.41–0.50	2.3	0.8	0.6	0.2	0.2	9.1	0.0	2.4	0.0	0.5
0.51–0.60	1.3	0.5	0.8	0.0	0.2	8.6	0.0	1.4	0.0	0.2
0.61–0.70	2.9	0.6	0.4	0.0	0.0	8.2	0.0	0.9	0.0	0.2
0.71–0.80	5.6	0.2	0.4	0.0	0.0	10.3	0.0	0.6	0.0	0.2
0.81–0.90	9.6	0.2	0.2	0.0	0.0	8.6	0.0	0.9	0.0	0.2
0.91–0.99	8.4	0.0	0.0	0.0	0.0	8.8	0.0	2.1	0.0	0.0
1.00	15.9	0.3	0.0	0.0	0.8	3.8	0.0	0.9	0.4	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Handicrafts		**Local fair trade**		**Sideline outside**		**Restaurant/service**		**Others**	
	Lhasa	County	Lhasa	County	Lhasa	County	Lhasa	County	Lhasa	County
0	92.0	74.3	84.5	89.5	98.7	85.1	96.4	79.9	86.0	57.7
0.01–0.10	0.6	13.1	1.1	7.0	0.5	4.9	0.0	8.5	2.5	17.6
0.11–0.20	0.6	4.4	1.0	1.1	0.6	3.5	0.4	4.0	1.0	9.9
0.21–0.30	0.2	2.3	1.0	0.9	0.0	2.1	0.2	2.3	1.0	6.3
0.31–0.40	0.0	1.5	0.0	0.3	0.0	1.1	1.1	1.5	1.3	3.7
0.41–0.50	0.4	1.1	1.0	0.5	0.0	1.2	0.0	1.1	0.6	0.8
0.51–0.60	0.4	1.2	0.2	0.2	0.2	1.1	0.2	1.5	0.4	2.0
0.61–0.70	0.6	1.2	0.8	0.2	0.0	0.5	0.2	0.5	0.2	0.5
0.71–0.80	0.8	0.8	1.0	0.0	0.0	0.5	0.2	0.3	0.4	0.3
0.81–0.90	0.4	0.0	0.4	0.2	0.0	0.0	0.2	0.5	0.4	0.3
0.91–0.99	0.8	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.4	0.3
1.00	3.4	0.2	8.4	0.3	0.0	0.2	1.1	0.0	5.9	0.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

by the government. They often were embroiled in conflicts with government institutions (e.g. The Bureau of Trade and Handicrafts about issues such as licensing and market management, and also with the bureau of tax collection and local police stations about the imposition of street rules, etc.) and as a result they often received the sympathy of their neighbors. This dynamic is one characteristic of social life in the old urban district of Lhasa.

Earning incomes from sideline activities outside their hometowns was relatively important for peasants but did not have a strong impact on Lhasa residents. Lhasa residents were found to have less geographic mobility. We assumed that the restaurants and other services would be more developed in Lhasa compared

with rural areas and that the residents of Lhasa should benefit from them, but our survey results indicated the reverse is true. The percentage of residents who derived income from these sideline services (above 50 percent of their total income) was 2.8 percent in rural areas vs. 1.9 percent in urban Lhasa. But obviously the restaurants are much more prosperous in Lhasa. One possibility is that a large proportion of these restaurants and service providers were actually owned by temporary migrants who were not covered in our survey. Among the self-employed private business households in Lhasa in 1988, 30.4 percent were from other provinces. Most restaurants we saw in Lhasa were managed by people from Sichuan or by the Hui from Gansu (Muslim restaurants). There were very few restaurants serving traditional Tibetan food. Apparently, in the late 1980s, restaurant services in the city largely were controlled by temporary migrants from other provinces, and this makes Lhasa a special case among Chinese cities. The situation changed in the 1990s, when more and more foreign tourists in Lhasa wanted to taste "real Tibetan food." Traditional Tibetan teahouses have also become popular in recent years.

Agricultural income has been the main source of revenue for the peasants. But only 31.5 percent of them earned more than 70 percent of their income from agriculture. This revealed common patterns of a "multi-activity" or diversified economy in the rural areas. Peasants were engaged in not only grain production, but also animal husbandry, handicrafts, sideline enterprises, etc. Among our rural respondents, 84 percent had pastoral income, 26 percent had income from handicrafts, 20 percent sold trees, 20 percent had income from service ventures, 15 percent made money from outside sideline activities, 10 percent had local trade income, and 42 percent had income from other sources (e.g. alimony or remittances from relatives).

The Statistical Bureau of the TAR (SBT) investigates rural households each year to calculate income structure. Their survey results are presented in Table 7.10. According to their findings, the three most important components of net income for rural residents in 1987 were: agriculture (43.0 percent), pastoral (20.7 percent) and collecting/hunting (13.2 percent). These numbers changed considerably in 2007: agriculture (29.1 percent), wages (21.9 percent, earnings from working for others) and animal husbandry (18.2 percent). Transfer income/property income was a new item in income statistics after 1990, and it became the fourth income in rural areas (15.9 percent) in 2007. Comparing survey results from 1987 and 2007, the importance of labor service, transportation and transfer of money and property increased, while collecting/hunting disappeared. Agriculture and animal husbandry developed in parallel to government investments in irrigation and rising prices for pastoral products. Although the income from farming and animal husbandry increased in absolute numbers, their percentages in total income declined. Farming income consisted of 50.1 percent of rural households' total income throughout China in 1990 and this fell to 32.3 percent in 2006 (STC, 2007: 367). One structural

Table 7.10. Structure of Net Income of Rural Residents in the TAR (1987–2008)

Sources	1987	1990	1995	2000	2004	2005	2007	2008
Wages (Laborer's remuneration)	4.2	0.2	6.6	17.4	28.5	26.4	21.9	22.1
Farming	43.0	56.1	40.7	23.6	37.7	32.1	29.1	30.0
Forestry	2.2	2.5	2.9	0.7	2.9	4.1	4.2	4.2
Animal husbandry	20.7	20.8	19.9	16.4	9.5	14.2	18.2	16.3
Handicrafts (industry)	5.5	0.2	0.7	2.3	0.2	0.2	0.5	0.4
Collecting/hunting	13.2	-	-	-	-	-	-	-
Construction	3.0	1.6	1.3	10.7	1.3	1.6	1.9	1.9
Transportation	3.5	3.6	5.5	8.4	4.0	3.4	3.3	4.1
Trade/restaurant	1.9	2.0	4.6	4.5	2.8	4.1	4.1	4.1
Transfer income/property income	-	6.7	8.3	8.3	12.3	12.6	15.9	15.7
Others	2.8	6.3	9.6	7.7	0.9	1.1	1.0	1.2
Total (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total net income (*Yuan*)	348	447	1,200	1,331	1,861	2078	2788	3176
Total number of sample households*	474	480	480	480	480	1480	1480	1480

* The sample size of the SBT for rural survey was 480 households during 1990–2004.
Sources: SBT, 1989: 523; 2007: 126; 2009: 128.

difference was that income from animal husbandry made up only 7.4 percent of rural households' total income throughout China in 2007. Animal husbandry, therefore, plays an important role in rural Tibet.

Construction became important because of government projects (roads, bridges, irrigation, housing, etc.) and private construction projects (housing). Transportation was important as well because of the improvement of roads in both distance and quality. Because of the government's emphasis on protecting wild animals, hunting activities were restricted to a certain extent. The sampling methods and the indicators in SBT's investigation are different from our 1988 survey, but both proved the trend of diversification of peasants' incomes in the TAR.

Consumption by Rural and Urban Residents of the TAR

The level of total consumption and its composition are the most important indicators of the standard of living of any society. One of the social problems in developing countries is the gap in consumption between rural and urban residents. The rural-urban gap in these countries represents the distance between villages that maintain traditional models of activities and lifestyles and cities that experience the process of modernization. In most developing countries, urban residents earn much more than rural peasants. This income gap and the correspondent consumption gap attract

a large influx of rural-urban migration into cities by peasants searching for their fortunes. These migration flows promote the process of urbanization on one hand, and produce a series of social problems on the other hand in rural areas, which lose their best workers, and cities, which face suburban poverty and increasing crime.

The income of urban residents is usually higher than that of rural people, and their consumption is also higher. Urban residents need to pay rent (if they do not own their housing) and for the use of water, fuel, electricity, transportation and food. Peasants usually build and own their own homes (although the quality may not equal those of their urban counterparts), and they provide their own grain, meat, vegetables, water, fuel, etc., which are either produced on their land or in their gardens, or collected in the fields free of charge. Therefore, when cash is used to measure levels of consumption, those differences must be taken into account.

Income level usually determines consumption levels. The percentage of those with a per capita income above 600 yuan in 1987 was 54.1 percent in urban Lhasa and 32 percent in rural areas. From Table 7.11, we notice that the percentage of those with a per capita consumption above 600 yuan in 1987 was 65.7 percent in urban Lhasa and 16.5 percent in the rural areas. In comparing the difference between income and consumption reported by respondents, several issues need to be addressed.

First, some urban respondents over-reported their daily expenses and under-reported their income. The result was that, on paper, their income didn't cover their expenses. This is not an unusual finding. In our 1988 survey we tried to compensate for this kind of misreporting. We asked that both the income and expenses of respondents be broken down by the quantity and prices of each item. Total income and total consumption were calculated by the researchers, not by the respondents. These amounts could then be checked through basic information available from local administrative records (contracted land, housing, etc.) and by using common sense. Prices of consumer goods and materials for production in the survey year were also checked against records of local institutions involved with market management. These measures reduced, to a certain extent, the differences between reported income and expenses. But the differences still existed. In interviews, people often complained about rising prices of consumer goods; they insisted that they really consumed certain items in the previous year and that expenses exceeded their incomes, so they appealed for a lowering of market prices while arguing for additional financial help from either the government or local community. Therefore, the income-expense difference can also be explained by the social psychology influencing interactions in the interview process.

Second, the difference between income and consumption was not large among the high-income groups in Lhasa. About 14.2 percent reported incomes above 1,500 yuan in Lhasa, and an average 15.4 percent reported consumption above 1,500 yuan in Lhasa. There is not a significant difference between the two percentages.

Table 7.11. Per Capita Consumption of Interviewed Households in 1987

Consumption	**Lhasa**			**County**		
Per capita (Yuan)	Household	%	Accum. %	Household	%	Accum. %
Less than 50	3	0.5	0.5	22	3.3	3.3
51–100	6	0.9	1.4	22	3.3	6.6
101–200	12	1.9	3.3	112	17.0	23.6
201–300	25	3.9	7.2	114	17.3	40.9
301–400	56	8.8	16.0	165	25.0	65.9
401–500	60	9.4	25.4	74	11.2	77.1
501–600	57	8.9	34.3	42	6.4	83.5
601–700	66	10.3	44.6	19	2.9	86.4
701–800	58	9.1	53.7	24	3.6	90.0
801–900	49	7.7	61.4	16	2.4	92.4
901–1000	32	5.0	66.4	11	1.7	94.1
1001–1100	25	3.9	70.3	8	1.2	95.3
1101–1200	36	5.6	75.9	11	1.7	97.0
1201–1300	14	2.2	78.1	8	1.2	98.2
1301–1400	20	3.1	81.2	1	0.2	98.4
1401–1500	22	3.4	84.6	2	0.3	98.7
1501–1600	10	1.6	86.2	4	0.6	99.3
1601–1700	13	2.0	88.2	1	0.2	99.5
1701–1800	5	0.8	98.0	1	0.2	99.6
1801–1900	7	1.1	90.1	0	0.0	99.6
1901–2000	12	1.9	92.0	0	0.0	99.6
2001–3000	26	4.1	96.1	2	0.3	99.9
3001–4000	7	1.1	97.2	0	0.0	99.9
4001–5000	7	1.1	98.3	0	0.0	99.9
> 5000	11	1.7	100.0	1	0.2	100.0
Total above	639	100.0		660	100.0	
Unknown	5			8		
Total interviewed	644			668		

In contrast, the difference between income and expenses among the high-income groups in rural areas was more obvious. A total of 10.8 percent reported their income above 1,000 yuan, and only 5.9 percent reported their consumption above 1,000 yuan. So some peasants confessed that their incomes were higher than their expenses, resulting in some personal savings. It is therefore safe to say that peasants were more accurate in reporting their actual situations than urban residents, who had more complaints about consumer-goods prices.

Third, about two-thirds (65.9 percent) of rural residents reported consumption below 400 yuan while about half (46.3 percent) of Lhasa residents spent above 800 yuan. If the rural-urban income gap is large in the TAR, the rural-urban consumption gap is even larger. This conclusion is shown by the survey data even when factors of under- or over-reporting are taken into account.

The expenses of rural and urban residents can be classified into nine categories (Table 7.12). These categories represent the basic consumption structure of their daily lives in the late 1980s.

Food was the largest single item in people's daily consumption in both rural and urban areas. About 83.8 percent of Lhasa respondents and 71.7 percent of rural respondents reported their food expenses above 50 percent of their total spending. Urban residents spent much more of their income on food while peasants could support themselves with the fruits of their own production.

The SBT reported that food consisted of 54.5 percent of total consumption among urban residents (including Lhasa) compared to 69.9 percent among rural residents in 1987 (SBT, 1989: 513,519). According to Engel's Law, poorer families have a higher percentage of food costs in their total consumption (Samuelson and Nordhaus, 1998: 414). Compared with peasants, Lhasa's urban residents should have spent less of their incomes on food because their incomes tended to be higher. The SBT's reports reflect this principle but differed from the results of our survey, which found Lhasa residents spent a higher percentage of their money on food than did the peasants. The reason for this discrepancy is either that urban residents over-reported to us their food expenses, or that peasants under-reported food expenses to the statistical officials.

The second important item with regard to consumption is clothing. It seems that peasants spent a significant part of their income on clothing. About 48.6 percent of rural respondents spent more than 20 percent of their total expenses on clothing in comparison to only 27.9 percent of urban residents. Of course, that does not mean peasants wear better clothes than urban people, only that the percentage of clothing consumption was higher among peasants, keeping in mind the large rural-urban income gap. The SBT reported that clothing accounted for 16 percent of total consumption for urban residents and 11.1 percent of the total for rural residents in 1987 (SBT, 1989: 513, 519). These results are also different from our survey.

The third item is housing. Nearly 80 percent of Lhasa residents had housing expenses while only 4.8 percent of rural residents claimed housing expenses (including expenses for repairs). It was reported that 20 percent of Lhasa residents and 95 percent of rural respondents owned their own homes. Although Lhasa residents paid rent, it was not high: 75 percent of them claimed that their rent was below 10 percent of their total expenses. Since housing is so important as a consumer good, and also as a fixed asset, it will be discussed further below.

Table 7.12. Consumption Patterns of Interviewed Households (1987)

% in	**Food**		**Clothes**		**Housing**		**Wedding**		**Funeral**	
Consum.	Lhasa	County	Lhasa	County	Lhasa	County	Lhasa	County	Lhasa	County
0	0.0	0.0	10.0	0.6	20.3	95.2	87.9	83.5	87.5	82.2
0.01–0.10	0.7	0.0	33.2	18.8	75.0	2.4	7.8	11.2	8.8	12.6
0.11–0.20	1.5	1.5	28.9	32.0	3.4	1.0	1.6	3.5	1.4	2.0
0.21–0.30	1.8	4.1	14.7	23.5	0.2	0.0	1.3	0.9	0.6	1.6
0.31–0.40	4.7	8.3	5.5	13.3	0.6	0.5	0.9	0.8	0.5	0.6
0.41–0.50	7.5	14.5	4.4	7.9	0.0	0.3	0.3	0.2	0.3	0.6
0.51–0.60	11.4	15.4	2.8	3.0	0.0	0.3	0.2	0.0	0.8	0.0
0.61–0.70	16.8	20.8	0.0	0.5	0.2	0.2	0.0	0.0	0.2	0.2
0.71–0.80	21.8	20.6	0.3	0.3	0.2	0.2	0.0	0.0	0.0	0.0
0.81–0.90	20.1	10.5	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0
0.91–0.99	13.2	4.2	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.2
1.00	0.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	To relatives		**Gifts given**		**Religious donation**		**Fuel**			
	Lhasa	County	Lhasa	County	Lhasa	County	Lhasa	County		
0	74.3	77.6	61.3	72.4	57.5	49.1	67.2	22.1		
0.01–0.10	20.9	19.2	35.5	27.3	34.0	45.9	27.8	38.4		
0.11–0.20	3.0	2.4	2.0	0.2	5.5	3.0	3.4	27.0		
0.21–0.30	0.9	0.5	0.6	0.0	1.4	1.5	1.6	9.1		
0.31–0.40	0.65	0.3	0.5	0.2	1.3	0.5	0.0	2.6		
0.41–0.50	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.6		
0.51–0.60	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.2		
0.61–0.70	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		

The costs of weddings and funerals are also important. Based on our research in other regions, this is sometimes a very significant item in peoples' budgets. For a household, a wedding or a funeral might take place only once every several years but it could consume a large proportion of their wealth when it does. In many regions there are various customs providing that relatives, friends, neighbors and colleagues should contribute to weddings and funerals. If a young man has several close friends who get married in the same year, he might have to contribute a significant amount of his income to help them all.

Table 7.12 suggests that wedding and funeral expenses among Lhasa residents were higher than those in rural areas. Some respondents claimed that their wedding/

funeral expenses made up more than 30 percent of their total expenses that year (21 households in Lhasa and 17 households in rural areas). That cost even reached 90 percent of total annual expenses for one rural household. A traditional Tibetan funeral calls for the family to invite monks to perform rituals to expiate the sins of the dead in order to hasten the speed at which the deceased person's spirit goes to heaven. This ritual can last several days and there may be a large number of monks needed. We observed such a ritual during our interviews in Lhasa. There were about 20 monks reading Buddhist scriptures for three days in the hallway of a house, all praying for the father of the head of the household, who passed away the previous month. Donations were required for the individual monks as well as for the nearby monasteries. Because of the revival of these rituals, funeral and wedding expenses are rising and should be given more attention in future studies of consumption patterns in Tibet.

The money given to support relatives also represented a more significant amount for Lhasa residents than for rural residents. About 25.7 percent of Lhasa respondents and 22.4 percent of rural respondents needed to support their relatives financially. At one extreme, this expense accounted for 60 to 70 percent of the total expenses in two Lhasa households. In general, elderly people in rural areas can still participate in some light work; they live in their own homes and do not need to pay rent. The proportion of elderly people needing support is lower in rural than in urban areas, and the cost of their support is also less. The TAR shares this pattern with other regions.

Exchanges of gifts took place more often among urban residents than among rural residents. About 38.7 percent of Lhasa residents said they had bought gifts for others, compared with 27.6 percent of rural residents who reported doing the same. Birthdays, moving to a new house, holidays, job promotion and school graduation all required gifts between friends, relatives, colleagues and neighbors. The exchange of gifts is important in establishing and maintaining social relationships and networks in China.

Donations to monasteries are also common expenses in the TAR in both rural and urban areas. In 1987 about 50.9 percent of rural respondents and 42.5 percent of Lhasa respondents reported giving donations (cash, butter, *tsamba*, etc.) to monasteries. Fewer Lhasa residents gave donations compared with peasants, but the donations given by Lhasa residents represented a larger percentage of income than in rural areas. About 1.7 percent of Lhasa respondents and 0.5 percent of rural respondents donated more than 30 percent of their total expenditure to monasteries. Some households even donated more than 50 percent of their total expenditure. Donations are a major income source for monasteries and in the past frequently consisted of a large proportion of people's disbursements. This category of consumption is being revived as Tibetans are beginning generously to donate more in recent years.

The findings in the category of fuel expenses were unexpected. We assumed that peasants could collect fuel from their fields (firewood, cow dung, crop stalks) while urban resident would have to buy fuel (coal, oil, firewood). We found that 67.2 percent of urban residents had no fuel expenses at all, compared with 78 percent of rural residents who did. There is no doubt that Lhasa residents need fuel to cook their meals and heat their homes during the winter. But why did two-thirds of them fail to report fuel expenses while they seemed to over-report other expenses (especially for food)? One possibility is that the residents, who worked in government institutions and earned salaries, could obtain free kerosene as a part of work-unit welfare or subsidies. We noticed that all the people in unit households cooked their meals using kerosene stoves. Through friends of friends, some residents in old urban areas of Lhasa could obtain free kerosene through channels other than directly from the government. Some respondents told us frankly about this and said they did not need to buy fuel. Those who did not have this channel had to buy firewood, kerosene or cow dung for fuel. During my interviews, I noticed a respondent had just bought two bags of dried cow dung for 50 yuan each. The free-fuel distribution network in urban Lhasa might be a good subject for studying the social networks as well as distribution patterns of resources in the TAR.

Only 22.1 percent of rural respondents had no fuel expenses while it consumed only 10 percent of total expenses for 40 percent of our rural respondents. One difference between urban and rural residents is that fuel includes not only that used for cooking, but also diesel and gasoline for machines (tractors, trucks and agricultural machines). This explains why 78 percent of rural households needed fuel and also indicates that agricultural machines are now more widely used in rural TAR.

Housing for Rural and Urban Residents in the TAR

Around the world people spend a large proportion of their incomes on housing; they also spend a large proportion of their time in their houses. Therefore, several questions in our questionnaire were designed specifically about housing.

The housing expenses discussed earlier in this chapter are consistent with the data in Table 7.13. About 25.7 percent of Lhasa respondents and 0.3 percent of rural residents did not pay rent, but 4.3 percent of rural households had house-repair expenses. A total 18.3 percent of Lhasa respondents and 98 percent of rural respondents owned their own homes. The difference between home owners and households not having to pay rent (7.4 percent in Lhasa and 1.7 percent in rural areas) might be explained by people living with relatives or borrowing houses from relatives or friends.

The SBT investigated 100 urban households in 1987. They reported that among these households, four percent owned their housing, one percent rented rooms/apartments from private owners, and 95 percent lived in housing owned by government institutions. This result mainly reflects the housing situation of unit households. Most government employees lived in the apartments of their work units; only a few employees recruited from the old urban areas still lived there with their parents. This was very different from the residents who lived in the old urban areas covered in our 1988 survey.

According to our survey, half of the residents who owned their homes inherited them. Others either built their homes by themselves (26 households) or bought them (10 households). We did not ask the date of construction, so some houses may have been built before 1959. From our observations during the interviews, conditions in the old urban areas of Lhasa were very crowded and there was no space for residents to build any additional houses. Many of the homes were old and quite dangerous to inhabit. We submitted a special report to the central government on housing in Lhasa after the survey. Since 1987, the government has invested 41.2 million yuan to repair or rebuild these dangerous houses in the traditional way using local Tibetan contractors. In recent years the government has decided that the situation remains unsatisfactory and planned to rebuild the entire old urban area.

For those who did not own their homes, three-fourths rented (mainly from private owners), one-fourth lived in housing assigned by government institutions, and a few lived with relatives or friends. The work units usually built office buildings and apartment buildings for their employees in the new urban areas outside the traditional areas. This is a basic characteristic of residential patterns in Lhasa.

Unlike the situation in Lhasa, 81.4 percent of rural respondents built their own houses and another 12.3 percent obtained houses from their parents. These two categories together comprise 93.7 percent of the total number of rural residents, reflecting basic housing patterns in rural TAR.

The type of construction materials is an important indicator of the quality of housing in terms of durability, value, appearance and comfort. In both rural and urban Lhasa, most homes have a stone foundation and adobe walls (64 percent in Lhasa and 61.7 percent in rural areas). Stone houses and pillbox-style houses made of stone together constituted 33.1 percent of the total in Lhasa and 36.4 percent in rural areas. It seems that the quality of rural housing is a little better than housing in the old urban area of Lhasa. Since the policies of the 1980s, peasants and herdsmen have increased their incomes and begun to build new houses of better-quality materials. There were more limitations for Lhasa residents, especially requirements for permission for land-use even if they could afford to build.

Another indicator for housing is the area/space, in other words, how many rooms per household. The room number measure (or *zhu* — number of pillars in a house) was used in the survey. It is clear that rural households have more residential

Table 7.13. Housing of Interviewed Households (1988)

Housing Situation	**Lhasa**		**County**	
	Household	%	Household	%
1. Ownership of present housing	117	18.3	648	98.0
Of that owned: (1) Built by owner	26	4.1	538	81.4
(2) Purchased	10	1.6	16	2.4
(3) Inherited	58	9.1	81	12.3
(4) Others	23	3.6	13	2.0
2. No ownership of present housing	523	81.7	13	2.0
Among these: (1) Rent	401	62.7	1	0.2
(2) Housed by work unit	116	18.1	5	0.8
(3) Staying with a relative	2	0.3	2	0.3
(4) Staying with a friend	4	0.6	3	0.5
(5) Others	0	0.0	2	0.3
Total	640	100.0	661	100.0
3. Structure of housing:				
(1) Made of stone	154	24.6	225	35.5
(2) Stone foundation and adobe walls	400	64.0	391	61.7
(3) House of a “pillbox” style	53	8.5	6	0.9
(4) Made of bricks and tiles	18	2.9	11	1.7
(5) Tent	0	0.0	1	0.2
Total	625	100.0	634	100.0
4. Number of rooms (Zhu)				
1 room	94	15.2	41	6.3
2 rooms	271	43.9	58	8.9
3 rooms	162	26.3	94	14.5
4 rooms	53	8.6	119	18.3
5 rooms	17	2.8	76	11.7
6 rooms	10	1.6	69	10.6
More than 6 rooms	10	1.6	193	29.7
Total	617	100.0	650	100.0
5. Rent paid for housing in 1987				
O yuan	165	25.7	662	99.7
1–10 yuan	264	41.2	1	0.2
11–20 yuan	77	12.0	0	0
21–30 yuan	32	5.0	0	0
31–40 yuan	29	4.5	0	0
41–50 yuan	28	4.4	0	0
51–100 yuan	19	3.0	1	0.2
> 100 yuan	27	4.2	0	0
Total	641	100.0	664	100.0

The exchange rate in 2002: 1 US dollar = 8.23 / 8.26 yuan.
The exchange rate in 2010: 1 US dollar = 6.82 yuan.

space than urban people do, as is true in other parts of China. The percentage of households that had at least three rooms was 14.6 percent in Lhasa and 70.3 percent in rural areas. More than 30 percent of interviewed rural households had more than seven rooms. In contrast, 15.2 percent of interviewed Lhasa households had only one room. I interviewed a family of four living in a small room of 7 m^2. Since room size is roughly similar in many areas of China, especially for houses built before the 1990s under the planned-economy system, the per capita room number therefore is a meaningful indicator for housing. This measurement also takes into account family size. The data in Table 7.14 confirmed the conclusion that rural people have more space than urban residents. Of the Lhasa respondents, 31.5 percent had less than half a room per member, while the percentage in the rural areas was only 12.5 percent. Households with one room per person comprised 52.3 percent of the total in rural areas, compared with 29 percent in old urban Lhasa.

Table 7.14. Number of Rooms Per Capita for Interviewed Households (1988)

# Rooms per capita	Lhasa	%	Accum.%	County	%	Accum. %
< 0.1	11	1.7	1.7	1	0.1	0.1
0.1–0.2	43	6.7	8.4	11	1.7	1.8
0.21–0.49	147	23.0	31.4	71	10.6	12.4
0.50	105	16.4	47.8	34	5.1	17.5
0.51–0.75	136	21.3	69.1	128	19.1	36.6
0.76–0.99	12	1.9	71.0	78	11.7	48.3
1.0	102	16.0	87.0	135	20.2	68.5
1.1–1.50	26	4.1	91.1	100	14.9	83.4
1.51–2.00	32	5.0	96.1	60	9.0	92.4
2.01–3.00	11	1.7	97.8	29	4.3	96.7
> 3.0	14	2.2	100.0	22	3.3	100.0
Total	639	100.0		669	100.0	

Lhasa residents lived with less space and the rents they paid for housing were moderate. House owners (18.3 percent) did not need to pay rent, and neither did those who lived with relatives or had an apartment provided by their work units. Of the rest, 41.2 percent paid an annual rent of between one and 10 yuan, 12 percent between 10 and 20 yuan and only 4.2 percent above 100 yuan. Clearly rent for these residents was not a heavy burden at that time.

The main factor that led to peasants improving their housing conditions was the introduction of the "household responsibility system." Able to earn more, they could save their money and rebuild their houses. Only 28.5 percent of our respondents did not re-build their houses after the reform (Table 7.15). About 40 percent of rural respondents built new houses with three rooms or more. About 56.2 percent spent 500 yuan or more in rebuilding costs and 28.5 percent had building costs of 1,000

yuan or more. Compared with the living conditions of these peasants it was easy for Lhasa residents to lose their balance financially. They lived in the holy city, admired by all Tibetans, but the houses or apartments they owned were poor and crowded. One of Lhasa residents' central complaints about the government relates to housing.

Rent in rural areas was low. Among rural respondents there were 13 households that did not own their housing but only two of them paid rent. One rented a house from a private owner (60 yuan); another rented an apartment from local government institutions (six yuan). The remaining 11 households lived with relatives or in government houses and did not pay any rent. In general, housing and living conditions (quality, space, expense) in rural areas were better than those in the old urban area of Lhasa. The changes in rural areas that followed the reform policy have been obvious and some villages have become prosperous through trade and development projects supported by international programs and the Chinese government. Urban residents in the old urban area of Lhasa also found many opportunities to increase their income although improvements in their living conditions (housing) has not kept pace.

Table 7.15. New Houses Built after the System Reform by the Interviewed Rural Households (1988)

Number of rooms	Households (%)		Cost of construction Or repair	Households (%)	
Did not build	168	28.5	< 20	159	27.2
1	92	15.6	20–100	16	2.7
2	92	15.6	101–200	33	5.6
3	83	14.1	201–300	46	7.9
4	58	9.9	301–400	31	5.3
5	26	4.4	401–500	44	7.5
6	26	4.4	501–700	38	6.5
7	13	2.2	701–1000	51	8.7
8	10	1.7	1001–1200	74	12.7
9	6	1.0	2001–3000*	40	6.8
10	9	1.5	3001–4000	16	2.7
11	4	0.7	4001–5000	10	1.7
12	1	0.2	5000–6000	7	1.2
13	1	0.2	> 6000	20	3.4
Total	589	100.0	Total	585	100.0

* There was no household with construction cost between 1200 and 2000 yuan.

There were a total of 8,686 households under the auspices of the residential committees in the old urban area of Lhasa. In the local government's statistical records about 3,000 households (34.5 percent) were classified as "households

without proper housing." The Lhasa City government invested 41.22 million yuan to improve their living conditions after 1988. About 2,000 households benefited from the government scheme but there are still many houses in need of repair (Gelek and Jin Xisheng, 1995: 101).

Durable Consumer Goods and Other Possessions Owned by Rural and Urban Residents in the TAR

Apart from housing, there are other indicators of people's consumption patterns and standards of living. The volume of consumer goods owned by residents may directly, or indirectly, reflect the character and pattern of their consumption as well as reflect the changes in social and economic life in Tibetan society.

We designed some questions in our 1988 survey about ownership of selected durable consumer goods and meaningful possessions that we assumed would be helpful in revealing the quality of people's lives and wealth. The results of this survey are presented in Table 7.16. For a rural-urban comparison, rural and urban residents are calculated separately.

The government statistical bureaus also investigate ownership of some consumer items every year. These bureaus selected a certain number of rural and urban households as their informants, keeping records in a longitudinal way. For example, the Statistical Bureau of the TAR (SBT) had 100 "urban informant households" and 474 "rural informant households" in the late 1980s. The Statistical Bureau of China (SBC) combined these data from each province and calculated them for the whole nation.

Unlike our limited sample in 1988, the SBT's urban sample covered cities and towns beyond Lhasa, and their rural samples beyond our three prefectures (Lhasa, Shigatse and Lhoka), giving their survey a greater geographic range. The sample size used by the SBT survey was smaller than our 1988 survey, however, and their sampling methods and number of informants can be questioned. It is possible that those sampled were mainly the households whose members were better educated and could record the income and consumption items (to fill the forms). Nevertheless, their findings are available and the data should not be ignored.

In order to compare our survey results with the government's statistical records we selected some comparable items and listed both our results in Table 7.17. The format used in this table is to calculate average ownership of items by the total item number per 100 households. Since the geographic coverage and samples are different, the results are obviously different. These numbers may seem tedious, but careful examination and comparison of this data reveal some interesting differentials in rural and urban society in the TAR. Table 7.17 also shows that the consumption patterns in both urban and rural areas of the TAR changed a lot after 2000. Some

items (watches, radios, etc.) were no longer counted. Instead, many new products (VCD players, microwave ovens, mobile phones, cars, computers, air conditioners, etc.) became popular in urban areas, and also entered rural areas. The following discussions are based on tables 7.16 and 7.17.

1. An attractive wall clock or desk clock usually costs from 80 to 500 yuan. According to our research in Inner Mongolia, urban residents and peasants are very proud of having striking wall or desk clocks in their living rooms as symbols of affluence. We found in our survey that 18 percent of Lhasa respondents and 7.7 percent of rural respondents had a wall or desk clock and some households had more than one clock. SBT reported that there were 16.9 clocks per 100 rural households in 1987 (more than our finding of 7.9). We believe that this is because SBT counted all clocks, including small alarm clocks. The SBT data show 2.5 clocks per 100 rural households in 1994, thereby calculating a reduction from 16.9 to 2.5 in seven years. The SBC data show an increase of clocks from 47 to 66 among 100 rural households throughout China. So the trend in the TAR is the reverse of that in the rest of China.
2. During our survey, we noticed that tape recorders were popular among Lhasa residents. The results showed that, on average, 100 Lhasa households owned 74 tape recorders. About 70 percent of respondents in Lhasa owned one tape recorder, and some owned two or three. About 30 percent of rural respondents owned tape recorders. These numbers are higher than the SBT's (31 in the city and 5.3 in rural areas). The SBC reports showed that the number of tape recorders per 100 households increased from 57 to 73 in urban areas and from 9.7 to 26.1 in rural areas for the whole of China from 1987 to 1994. The SBT reports also show the number increased from 31 to 90 in urban areas in the TAR and declined from 5.3 to 0.1 in rural areas from 1987 to 1994. It is hard to tell what caused the decline in tape recorders in the rural areas. After 2000, stereo recorders became unpopular in both rural and urban Tibet; instead, hi-fi stereos entered people's homes in the TAR and China as a whole. Because of the rapid development of cable-TV channels (there are about 60 channels now in China) and the increase in entertaining programs, the number of VCD/DVD players per 100 households declined in both rural and urban areas.
3. The number of radios found in our survey also differed from that of the SBT in 1987, lower in urban (49.1 vs. 70.0) areas and higher in rural ones (41.7 vs. 27.2). In many cases, a radio was combined with a tape recorder. The difference might be explained by the fact that some were identified just as tape recorders and some for both. But these numbers at least indicated that radios were common in urban areas and villages. Broadcast media can now reach remote areas. For a region with very low population density this has special significance in establishing communications with the outside world and obtaining information on trade, technology and social and economic events. It

Table 7.16. Durable Consumer Goods and Main Possessions of Interviewed Households (1988)

Items	Quantity	Lhasa	County	Items	Quantity	Lhasa	County
Wall clock	0	82.0	92.3	Tibetan Cabinet /cabinet	0	6.1	44.2
	1	17.8	7.5		1	15.8	21.4
	2	0.2	0.2		2	40.1	17.4
	Subtotal	100.0	100.0		3	10.6	8.9
Tape Recorder	0	28.5	69.3		4	18.7	4.9
	1	69.3	29.5		> 4	8.7	3.2
	2	1.9	1.0		Subtotal	100.0	100.0
	3	0.3	0.2	Tibetan Carpet	0	7.1	38.9
	Subtotal	100.0	100.0		1	12.4	20.7
Radio	0	51.1	61.1		2	32.7	16.8
	1	48.7	36.3		3	12.4	12.4
	2	0.2	2.6		4	21.7	7.2
	Subtotal	100.0	100.0		> 4	13.7	4.0
TV	0	30.5	91.8		Subtotal	100.0	100.0
	1	68.6	7.5	Motorcycle	0	97.2	88.0
	2	0.9	0.3		1	2.2	8.8
	3	0.0	0.2		2	0.0	1.6
	4	0.0	0.2		3	0.0	1.0
	Subtotal	100.0	100.0		4	0.6	0.3
Sewing Machine	0	60.5	77.5		> 4	0.0	0.3
	1	38.9	21.8		Subtotal	100.0	100.0
	2	0.3	0.3	Big Tractor	0	99.2	97.9
	3	0.3	0.0		1	0.2	1.7
	4	0.0	0.2		2	0.6	0.2
	6	0.0	0.2		4	0.0	0.2
	Subtotal	100.0	100.0		Subtotal	100.0	100.0
Tibetan Butter tea Bucket	0	73.1	29.4	Small Tractor	0	99.4	94.7
	1	25.6	60.5		1	0.2	5.3
	2	1.3	9.8		2	0.4	0.0
	3	0.0	0.3		Subtotal	100.0	100.0
	Subtotal	100.0	100.0	Large Cart	0	99.2	95.4
Bicycle	0	30.5	73.1		1	0.8	4.2
	1	35.0	21.0		2	0.0	0.0
	2	23.9	5.0		> 2	0.0	0.4
	3	8.0	0.7		Subtotal	100.0	100.0
	4	2.0	0.2	Small Cart	0	94.9	88.4
	5	0.6	0.0		1	4.7	11.2
	Subtotal	100.0	100.0		2	0.4	0.4
Truck	0	95.9	96.2		Subtotal	100.0	100.0
	1	3.4	3.1	Large Agricultural Machine	0	99.8	85.0
	2	0.5	0.5		1	0.2	2.6
	3	0.2	0.2		2	0.0	1.8
	Subtotal	100.0	100.0		3	0.0	1.8
Watch	0	17.0	61.6		4	0.0	1.1
	1	27.8	22.5		> 4	0.0	7.7
	2	32.0	9.7		Subtotal	100.0	100.0
	3	14.1	2.9	Tibetan Table	0	79.1	53.5
	4	5.0	2.4		1	12.5	26.2
	> 4	4.1	0.9		2	7.0	13.6
	Subtotal	100.0	100.0		> 2	1.4	6.7
					Subtotal	100.0	100.0

Table 7.16. (Continued)

Items	Quantity	Lhasa	County	Items	Quantity	Lhasa	County
Sheep/ Goat	0	97.5	22.0	Donkey	0	100.0	64.1
	1–10	2.3	19.1		1	-	14.7
	11–20	0.2	18.9		2–5	-	21.2
	21–30	-	10.1		Subtotal	100.0	100.0
	31–50	-	11.9	Pig	0	99.7	67.8
	51–100	-	11.5		1–5	0.3	18.0
	101–150	-	2.8		6–10	-	10.6
	151–200	-	1.8		> 10	-	3.6
	201–250	-	0.8		Subtotal	100.0	100.0
	> 250	-	1.1	Chicken	0	99.0	57.4
	Subtotal	100.0	100.0		1–5	0.6	29.3
Cow/ Bull	0	98.0	11.7		6–10	0.4	8.0
	1–5	1.9	40.0		> 10	-	5.3
	6–10	0.1	26.9		Subtotal	100.0	100.0
	11–15	-	10.1	Gold/ gem jewelry (yuan)	0	84.1	65.2
	16–20	-	5.0		1–100	-	4.3
	21–30	-	3.7		101–500	3.1	13.0
	31–50	-	1.6		501–1000	3.0	7.1
	> 50	-	1.0		1001–2000	4.2	5.5
	Subtotal	100.0	100.0		2001–3000	2.8	1.3
Horse	0	99.5	80.9		3001v4000	1.1	1.1
	1	0.3	10.1		4001–5000	0.6	0.3
	2	0.2	5.1		> 5000	1.1	2.2
	> 2	-	3.9		Subtotal	100.0	100.0
	Subtotal	100.0	100.0				
Mule	0	100.0	96.9				
	1	-	2.6				
	2–5	-	0.5				
	Subtotal	100.0	100.0				

Table 7.17. Durable Consumer Goods Owned per 100 households (1988–2006)

	1988 PKU Survey		1987 SBT(Tibet)		1987 SB (China)		1994 SBT(Tibet)		1994 SBC(China)	
Goods	Lhasa	County	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
Bicycle	118	34	215	25	176	99	260	11	192	137
Sewing Machine	40	24	50	14	74	50	36	5	64	63
Watch	177	65	307	34	314	161	-	17	-	174
Electric Fan	-	-	1	3	103	20	6	-	154	81
Washing Machine	-	-	19	-	66	5	78	0	87	15
Refrigerator	-	-	5	-	19	0	44	0	62	4
Cabinet	255	121	192	34	105	64	60	9	89	86
Sofa	-	-	124	7	145	23	208	3	207	60
Desk	-	-	70	22	87	47	73	9	89	77
Radio	49	42	70	27	67	53	-	6	-	31
B-W TV			7	0	64	22	4	1	31	62
Color TV	71	9	83	1	34	2	96	0	86	14
Tape Recorder	74	32	31	5	57	10	90	0	73	26
Camera	-	-	32	-	14	1	44	0	30	1
Clock	18	8	-	17	-	47	-	3	-	66
Motorcycle	4	18	1	1	-	1	13	0	-	3
Truck	5	5	-	-	-	-	-	-	-	-

Source: SBT, 1989: 515, 531, 369; 1995: 128, 139.
SBC: 1988: 817; 1995: 263, 287.

Table 7.17. (Continued)

Goods	2000 SBT(Tibet)		2000 SBC(China)		2006 SBT(Tibet)		2006 SBC(China)	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
Bicycle	200	79	-	120	92	28	-	99
Electric Fan	4	-	-	123	7	-	-	152
Washing Machine	100	2	91	29	75	9	97	43
Refrigerator	74	0	80	12	68	7	92	22
Color TV	120	9	117	49	105	52	137	89
Motorcycle	5	0	19	22	19	17	25	45
Camera	54	1	38	3	34	1	48	4
Stereo Recorder	69	45	20	22	62	46	15	10
Video Camera	-	-	1	-	2	-	5	-
Telephone	-	0	-	26	86	21	93	64
Mobile Phone	30	-	20	4	91	-	153	62
Computer	1	-	10	0	10	-	47	3
Hi-fi Stereo Component	24	0	22	8	23	4	29	14
Microwave Oven	3	-	18	-	15	-	51	-
Hot Water Shower	12	-	49	-	11	-	75	-
Air Conditioner	3	-	31	1	11	-	88	7
VCD/DVD Player	52	0	20	3	73	29	15	3
Car	-	-	1	-	4	-	4	-

Sources: SBT, 2007: 110,130; SBC, 2007: 351, 375.

is expected that cable-TV coverage will increase very soon and that radios will no longer be used in rural Tibet.

4. Apart from radio, TVs and telephones are also important for communication and information delivery. TVs were common in Lhasa and in 1988 about 70 percent of our urban respondents owned a set. The SBT report was even higher (83 color TVs and seven black/white TVs per 100 households). TV programs provide fresh, rich and visible information to Lhasa residents and certainly have a strong influence on their lives. About 8.2 percent of our rural respondents owned a TV set in comparison to only one TV set for 100 rural households in 1987 and 1.3 TVs in 1994, according to the SBT report. The scarcity of TVs in rural TAR far exceeds that of comparable areas in other parts of China. Accompanying investment in the TAR, there were 52 color TVs per 100 rural households in 2006, which shows great progress in mass-media coverage.
5. Sewing machines allow people to make their own clothes. When people cannot afford to buy all their clothing in stores, or they live far away from the stores, sewing machines are tremendously helpful. Sewing machines are the halfway point in a transition process from when people cannot afford to buy anything, including sewing machines and materials, to when they can afford to buy all their clothing readily in the marketplace.

Among our respondents, 40 percent in urban Lhasa and 22.5 percent in rural areas claimed to have a sewing machine. The SBT reported that per 100 households, 50 in urban districts and 13.7 in rural ones owned one. The SBT probably covered unit households in Lhasa (which have higher incomes) and poor remote rural areas (which have lower incomes). The numbers in both our survey and SBT reports were lower than the national level (74.9 urban and 49.8 rural).

In recent years, Tibetan residents have earned higher incomes and spent more on food and clothing. SBT records show that the annual cost of food for urban residents increased from 504 yuan in 1985 to 1,572 yuan in 1994, and their annual clothing expenses increased from 132 yuan in 1985 to 564 yuan in 1994 (SBT, 1991: 363; 1995: 123). It seems that many people paid more attention to housing and food rather than clothing, which is reflected in the ownership of sewing machines. Rural residents spent 43 yuan on clothing on average in 1990, and 234 yuan in 2007. When incomes rose and people's clothing expenses increased, according to both SBT and SBC records, the number of sewing machines decreased among urban residents from 1987 to 1994. Now Lhasa residents are more inclined to purchase ready-made clothes rather than making them themselves. Sewing machines were no longer a category of consumption in SBT and SBC surveys after 2000.

6. A butter tea bucket is an indispensable item for making Tibetan tea that has, for centuries, been a daily Tibetan activity. It costs 50 to 80 yuan in the market, making it rather expensive but, nevertheless, it is a symbol of the traditional Tibetan lifestyle. Some Tibetan members of our research team suggested that this item be included in our questionnaire. The survey found that 27 percent of Lhasa respondents and 70 percent of rural respondents had a tea bucket. If our data are correct this might suggest the lifestyle of Lhasa residents is undergoing a fundamental change.

   During our interviews in old urban Lhasa, we were warmly welcomed by the respondents. They often offered us tea, although in most cases they did not make the butter tea in the traditional fashion. Instead, the wife or children went out with a thermos bottle and came back with the hot sweet tea in it. There is a tea house on almost every corner of old urban Lhasa, making the purchase of tea very easy. The price of butter is high and black tea is becoming more popular, which may provide another explanation as to why Lhasa residents own fewer tea buckets.

7. Because there was no bus service in Lhasa in 1988, bicycles became the main mode of local transportation. Among our respondent households, 35 percent owned one bicycle, 23.9 percent owned two, eight percent owned three, and only 30.5 percent were without bicycles in 1988. The SBT records are even higher (215 bicycles per 100 households) because they covered unit households.

It is possible this difference (117.8 vs. 215) reveals the occupational and lifestyle differences between residents in the old urban area and those in unit households.

Among our rural respondents, 26.9 percent owned at least one bicycle and there were 34 bicycles per 100 households on average. This result is higher than the SBT survey's (25 bicycles per 100 rural households in 1987). But it is still lower than the national average (99 bicycles per 100 households). The numbers of bicycles owned by urban residents in the TAR fell from 200 to 92 per 100 households from 2000 to 2006. There was a similar trend in rural areas: a decline from 79 bicycles to 28 bicycles per 100 households during the same period but it was still a little more than the national average (120 in urban and 99 in rural areas). This might partly be explained by the increase of motorcycles in both rural and urban areas (19 motorcycles per 100 urban households and 17 per 100 rural households in the TAR in 2006).

8. Summer nights are cool in Lhasa, situated as it is on the roof of the world; refrigerators, therefore, have limited usage here. The SBT records noted five refrigerators per 100 urban households in 1987, about one-fourth the national level. This increased to 44 refrigerators per 100 urban households in 1994 and to 68 in 2006. Cool weather also reduces the need for electric fans, with only one per 100 households in urban areas of the TAR in 1987, compared with 103 fans at the national level. Air conditioners became a new item in the SBT's annual consumption survey after they appeared in urban Tibet. In 2006 there were 11 air conditioners per 100 urban households in the TAR.
9. Washing machines were introduced into residents' homes in the early 1980s. The SBT data suggested 19 washing machines per 100 urban households, compared with 66 washing machines at the national level in 1987. Washing machines need electricity, running water and a sewer system. Electricity supply in Lhasa was not stable in 1988 and most houses in the old urban area had no sewer system, thereby limiting the use of washing machines. There were 91 washing machines per 100 urban households and 29 per 100 rural households in 2006, indicating that electricity, running water and sewer systems have improved greatly recently in both rural and urban areas in the TAR.
10. Cabinets (both western-style cabinets and Tibetan cabinets are made of wood) were popular among Lhasa residents. Only six percent of our urban respondents did not have a cabinet. Western cabinets with mirrors can be used to hang coats, suits, jackets, shirts, etc. They are particular popular among young people. The Tibetan cabinet is the same as a traditional Chinese cabinet in that it is like a trunk for storing quilts and clothing; a desk clock and Buddha-statue niche can be placed on top. Its shape and decorative pattern are quite traditional and loved by the older generation. We found that many households have both. The SBT records suggested 192 cabinets per 100 urban households in 1987, twice the national level.

Because our survey included Tibetan cabinets, our results were higher (121 cabinets per 100 households) than the SBT records of this item (33.5) for rural areas. The SBT records were also lower than the national level (64.3). Considering the strong traditional consumption patterns in rural Tibet, the fact that one-third of respondents had a western cabinet was a sign of growing prosperity. Later SBT surveys did not cover this item.

11. A *Kadian* is very common in Tibetan families. It looks like a rectangular carpet or rug, and is hand made from pure wool with beautiful traditional Tibetan patterns. People may sit or lie on it. It costs several hundreds, even thousands, of yuan. They are usually sold in pairs, which explains why 32.7 percent of our Lhasa respondents had two *kadian* and another 21.7 percent had four. Rural people earned less and bought *kadian* for daily use rather than for decoration; some (20.7 percent) had just one, some (16.8 percent) had two, but not necessarily a pair, some (20 percent) had three or more. Peasants paid less attention to buying them in pairs.
12. A Tibetan desk is made of wood with carved patterns and colors similar to those found on Tibetan cabinets. Their designs are traditional and popular among Tibetans. Tibetan desks are decorated to match other Tibetan-style furniture. About 20 percent of urban respondents and 46.5 percent of rural respondents had a Tibetan desk. Lhasa residents may have had higher incomes but they had fewer Tibetan desks. This reflects the difference between rural and urban residents in their consumption patterns. It might indicate that some urban Tibetan residents have embraced new styles of furniture.
13. Motorcycles, which are luxury items for most residents, appeared in Tibet only in the 1980s. We found that more peasants than urban residents (12 percent vs. 2.8 percent) owned motorcycles in 1988. Lhasa is a small city, and by walking or riding a bicycle people can meet local transportation needs. Rural areas in Tibet, however, are sparsely populated and lacking in public transportation. Some rich peasants bought motorcycles for transportation. It is hard to explain why, in comparison to our survey results, the SBT recorded so few motorcycles. The SBT survey shows that urban residents owned 19 motorcycles per 100 households in 2006, which probably suggests that some young people are now upgrading their transportation options from bicycles to motorcycles.
14. We noticed that in both urban and rural areas, some residents had begun to buy trucks for private long-distance transportation businesses. Because there was no railway in the TAR until 2006, many goods had to be transported from Golmud or Sichuan to Lhasa by truck and then distributed to other towns and villages in the TAR, making trucks an important transportation medium. Among Lhasa residents interviewed, 4.1 percent owned a truck; one person owned two. About 3.8 percent of rural respondents owned a truck. The figures are small, but these trucks are playing important roles in the growing markets of Tibet.[5] This item should be added to the SBT's list of enumerated items.

Transportation teams managed by the government are still state-owned and are being managed under the planned economy system, not by market demand, which provides considerable opportunities for entrepreneurial private businesses. We observed that it was very profitable to transport watermelons and other fruit from Dunhuang (western Gansu) across Qinghai province to Lhasa. Others transported vegetables and meat from Sichuan to Lhasa. When there is a demand for something by consumers and that item is listed in the government transportation plan, there is the opportunity for private truckers to make money. Private truck owners even go as far as Nepal and India.

15. Tractors play vital roles in agriculture and transportation. The number of tractors directly indicates the general level of agricultural mechanization. In 1990 there were 2,314 large/medium tractors (totally 97,000 kW) and 8,414 small tractors (totally 76,000 kW). Considering the total agricultural population (1.88 million), in 1990 there would have been 96.9 watts of tractor power per capita in the TAR. The total power of agricultural machinery in the TAR was 454,000 kW or 208 watts per capita, close to the national level in 1990 (251 watts per capita) (SBT, 1991: 153; SBC, 1991: 323). The situation has greatly improved since 2000.

    In our survey, we discovered that 0.8 percent (five households) of urban respondents owned a large tractor and 0.6 percent (four households) owned a small tractor. The owners were all private entrepreneurs engaged in transportation. In other cities in China, urban private transportation entrepreneurs usually operate trucks not tractors, although peasants in the suburbs drive tractors. The phenomenon of Lhasa residents owning tractors reflects the oddity that the city administration has no restrictions on tractors in the cities and our finding that some urban Lhasa residents maintain some peasant characteristics.

    Among our rural respondents, 2.1 percent and 5.3 percent owned large and small tractors respectively. If a large tractor is counted as 41.9 kw and a small tractor as 9 kw,[6] and we assume 5.7 persons per rural household, the power owned per rural person was 213 watts and 84 watts for large tractors and small tractors respectively, which together adds up to 297 watts. This figure exceeded the national level in the same year, which surprised us. If our survey results are reliable, we can say that agricultural mechanization in the TAR has great potential.

16. Big carts (drawn by two or four horses or mules) and small carts (drawn by one horse, donkey or a bull) are traditional modes of transportation and still commonly used in rural areas. It was quite unusual to find, on average, each of five urban households in Lhasa owning a big cart while each of 31 urban households owned a small cart. These residents lived in the core of the city but continued to maintain their peasant customs in the late 1980s. Among the

Lhasa households interviewed, three had a horse and 13 had a bull or cow, animals that could be used to draw these carts. We observed these carts being used to transport bricks and stones from the suburbs to the old urban areas as construction materials and to transport vegetables to the city market in Lhasa. These animals were raised in yards, something seldom seen any more in other cities in China.

In rural areas, 4.6 percent and 11.6 percent of respondents owned a big cart and small cart respectively. This is not surprising in villages. About 15 percent of rural respondents owned some large piece of agricultural machinery (plough, harvester, thresher, etc.). This suggests that agricultural machines in rural Tibet are commonly used. But when we traveled in the countryside, we noticed the traditional method of ploughing (two bulls with a harness across their shoulders drawing a traditional plough) was still very much in practice. How to adapt machinery to agriculture is one of the challenges facing the government of the TAR.

17. Urban residents do not own only horses, cows and donkeys, but also sheep, pigs and fowl. Among Lhasa households interviewed in 1988, 11 had one sheep, two had two sheep, another two had three, and one household kept 15 sheep in a central area of the city. During our interviews we often noticed sheep, pigs and chickens in the yards. And children were happy to play with them. The real number of chickens needs to be addressed in a subsequent survey as we found chickens in almost every yard.

    As discussed above, pastoral income is an important sideline for Tibetan peasants. About 84 percent of rural respondents had pastoral income in 1987. From Table 7.16, we learn that 78 percent of rural respondents owned sheep, 88.3 percent owned cows and bulls, 19 percent owned horses, 36 percent owned donkeys, 3.1 percent owned mules, 32.2 percent raised pigs and 42.6 percent raised chickens. The numbers of animals, in some cases, were quite large. If these animals were calculated, their market prices could represent significant wealth.

18. The respondents were asked about the total value of their gold and gem jewelry. Although we regarded reliability about this item to be low we still included it in our questionnaire in case interesting data emerged. Not surprisingly, people were hesitant to give us this information, even when we saw they were wearing jewelry. Nevertheless, the results can still be used as a reference in trying to compare wealth among respondent families.

    About 16 percent of Lhasa respondents and 30 percent of rural respondents reported that they had jewelry worth more than 100 yuan. Since there is no doubt that Lhasa residents had higher incomes and higher levels of consumption, the rural-urban difference here can be interpreted only as either peasants being more honest or Lhasa residents spending their money

on goods other than jewelry, indicating different consumption patterns. The households that owned jewelry above 2,000 yuan comprised 5.6 percent (36 households) in Lhasa and 4.9 percent (33 households) in rural areas. Actually, by examining the official statistics of consumption items and their changes over time we can learn a lot about people's consumption patterns and lifestyle. The above discussion is brief, but it still can provide some information that helps us understand how Tibetans lived in the late 1980s.

Factors Affecting Incomes of Rural and Urban Residents

The 1988 survey identifies the basic situation of urban and rural residents in the TAR, analyzing some indicators of their demographic, social and economic characteristics (income, consumption, housing, property, etc.) with various comparisons (longitudinal and cross-sectional). Are there any correlations among the variables that offer significant insights? If there are such correlations, how strong are they and what do they signify? We tried to answer these questions through statistical analyses of the survey data. Our main concern was to identify the factors that significantly affect people's income and consumption. The correlation analysis can be used to give a fundamental measure of the linear relations between these variables in pairs. Ten variables were selected for correlation analysis. Among them, seven represent the major social, economic, and demographic aspects of interviewed household heads: (1) gender, (2) age, (3) place of birth, (4) years in school, (5) educational achievement, (6) registration status, (7) religious belief. The years in school are meaningful because some children (especially in rural areas) quit school before graduation. This variable provides additional information about these children. The other three represent economic and lifestyle aspects: (8) per capita annual income in 1987, (9) per capita annual expenses in 1987, and (10) per capita number of rooms per house. In order to examine rural-urban differentials, Lhasa and rural respondents are separated in the data analysis.

The correlation matrix is presented in Table 7.18. The correlation coefficients with a high statistical significance are marked with asterisks (* or **). The following discussion will focus on the correlation coefficients with asterisks.

We expected to find a strong positive correlation between years in school and educational achievement (.9018** and .8506** for Lhasa and rural areas respectively). The negative correlation between age and years in school as well as educational achievement indicates that young household heads spent more years in schools and completed higher degrees. This reflects how quickly education has developed in both urban and rural areas in Tibet (–.3806**, –.3542** for Lhasa and –.2681**, –.2666** for rural areas).

Table 7.18. Correlation Matrix

		Sex	Age	Birth P.	Year Sch	Edu.	Regis.	Religion	Income	Consump
Lhasa	Age	.0794	-	-	-	-	-	-	-	-
	Birth place	.0216	.2588**	-	-	-	-	-	-	-
	Year in sch.	-.2647**	-.3806**	-.2264**	-	-	-	-	-	-
	Education	-.2717**	-.3542**	-.1766**	.9018**	-	-	-	-	-
	Registration	0.248	-.0213	-.0171	-.0455	-.0480	-	-	-	-
	Religion	-.1630**	-.1160*	–.0218	.1631**	.1816**	-.0230	-	-	-
	Income	-.0634	-.0355	.0199	.1306*	.1516**	-.0333	.0194	-	-
	Consumption	-.0476	-.0253	.0002	.0891	.1171*	-.0333	.0228	.3035**	-
	Housing	-.0168	.1726**	.0585	-.0371	-.0108	-.0393	.0073	.0797	.0807
County	Age	.0405	-	-	-	-	-	-	-	-
	Birth place	.0183	.1094*	-	-	-	-	-	-	-
	Year in sch.	-.1022*	-.2681**	-.0973	-	-	-	-	-	-
	Education	-.1787**	-.2666**	-.0540	.8506**	-	-	-	-	-
	Registration	-.1133*	-.0321	-.0908	-.1491**	-.0764	-	-	-	-
	Religion	-.0192	-.0640	.0728	-.0250	.0169	0.778	-	-	-
	Income	.1025*	-.0208	.0160	.1276*	.0869	-.1054*	-0.75	-	-
	Consumption	.1558**	.0118	.0343	.1143*	.0869	-.0840	-.0529	.3961**	-
	Housing	.0450	.0531	.0340	-.0161	-.0397	-.0724	.0912	.1344**	.1995**

Significant level: * < .01; ** < .001.

Gender has a negative correlation with education and this correlation is higher in Lhasa (–.2647** and –.2717** for Lhasa, –.1022* and –.1787** for rural areas). Boys received more education than did girls, especially in Lhasa. This is different from other parts of China, where urban girls enjoy similar educational opportunities. "Gender discrimination" against girls in sending children to schools is common in both rural and urban areas in Han regions, but this discrimination is usually stronger in rural areas. Peasants sometimes prefer sending boys to schools and keeping girls working at home, or they ask girls to quit before graduation. They tend to invest more in boys, and consider that investment in girls' education will be lost when they marry. It seems that Lhasa residents neglected girls' education more than peasants did. This is unexpected and needs further explanation.

The negative correlation between gender and registration status confirms the phenomenon we discussed above that non-agricultural households in either urban or rural areas tended to have females as heads of households. The coefficient is weak in Lhasa since Lhasa residents were homogeneous (98.9 percent) with urban status.

There is a positive correlation between income/consumption and gender in rural areas (.1025* and .1558**). The households with a female as their head earned more. The situation is reversed in Lhasa with a negative correlation (–.0634 and –.0476), though the significant level is low and value of the coefficient is small.

The difference between Lhasa and rural households with a female as head in their population structure, division of labor, etc. needs further survey. One possibility is that Lhasa households with a woman head of household lacked male laborers, and for this reason their households earned less. Meanwhile, rural households with female heads tended to have big families. Some peasants registered a female as head of household for various reasons: the most senior member was a female, or they followed the local cultural traditions that provide for females being heads of households.[7]

The older the household heads, the further away their place of birth from their present residence (.2288** for Lhasa and .1094* for rural areas). It is construed that the possibility of migration increased with age, especially for urbanites.

A weak correlation between age and housing size in rural areas (.0531) can be compared with a significant correlation between the two variables in Lhasa (.1726**). Regardless of their age, peasants have built many new houses in recent years. In a very crowded urban area, old Lhasa residents might have received housing in the 1959 reform (distribution of confiscated nobles' houses), or through inheritance, or from a work unit. People of younger generations cannot afford to build houses within the city, so they often stay with parents and their only chance for apartment assignment probably involves waiting for housing from the work unit, if they work in government institutions.

The negative correlation between place of birth and education indicates that native-born residents have a higher education than migrants. This is only for the old urban area (–.2264**). In contrast, migrants in work unit households definitely have a higher education than natives. In the old urban area of Lhasa, new migrants are self-employed or unemployed and made the move as adults with little education, while natives have benefited from school development in Lhasa since 1959.

Table 7.19 shows more educational achievement among native Lhasa household heads compared with other groups. The illiteracy rate for native-born Lhasa residents was 69.6 percent, lower than those born in other counties of Lhasa City (73 percent) and those born in other prefectures (86 percent) and other provinces (84.2). Migrants to old urban Lhasa are marginal when it comes to their educational background and occupations. Native-born residents play a key role in the local community of the old urban area, while migrants in unit households play a key role in the new urban area. This contrast, and the touchy relationship between these two groups, is key to understanding Lhasa.

Peasants in the countryside can be seen as the third residential group. We discussed some structural characteristics (place of birth, education, occupation, etc.) and demonstrated that the urban residents in the old urban areas in Lhasa shared many characteristics with peasants in the suburbs. It was very easy for psychological cohesion to develop between these two groups of native Tibetans. This social network pattern may explain many social phenomena in the TAR.

Table 7.19. Years in School of Interviewed Household Heads by Place of Birth

	Place of	**Years in school**														
	Birth	0	1	2	3	4	5	6	7	8	9	10	12	13	15	Total
Lhasa	Urban Lhasa	172	3	7	12	10	22	3	3	7	2	2	1	1	22	247
	Within Prefecture	65	3	5	3	4	7	1	-	-	-	-	1	-	-	89
	In the TAR	147	5	2	8	4	3	-	-	1	1	-	-	-	-	171
	Other province	16	-	-	1	1	-	1	-	-	-	-	-	-	-	19
	Total	400	11	14	24	19	32	5	3	8	3	2	2	1	2	526
County	Within county	352	11	26	20	20	18	5	5	6	1	2	-	-	-	465
	Within Prefecture	58	3	5	5	1	1	-	-	1	-	-	-	-	-	74
	In the TAR	17	-	-	1	-	-	-	-	-	-	-	-	-	-	18
	Other province	2	-	-	-	-	-	-	-	-	-	-	-	-	-	2
	Total	429	14	31	26	21	19	5	5	7	1	2	0	0	0	559

A positive correlation exists between income and education (years in school) in both Lhasa and rural areas (.1306* and .1276*). In most cases, school education helps Tibetan youths to find jobs in construction and transportation when they move to cities and towns where government projects and tourism provide opportunities.

There is a negative correlation between registration and income in rural areas (–.1054*). That means non-agricultural residents (cadres or workers) earn more than peasants do. Since there are very few Lhasa respondents (1.1 percent) with an agricultural registration status, this correlation had little statistical significance in Lhasa.

It is natural to find a positive correlation between income and consumption, as is the case in Lhasa and rural areas. The positive correlation between income and housing in rural areas is significant (.1344**), but very weak in Lhasa (.0797). To build better housing in Lhasa requires conditions other than income (e.g. permission to use the land). The expense of building a house or buying an apartment is also much higher in Lhasa than in rural areas. The high positive correlation between consumption and housing (.1995**) in rural areas and a weak correlation (.0807) in Lhasa proved that peasants were able to spend a large part of their consumption on improving housing while those in Lhasa have to use their money on other things.

Apart from correlation analysis, we tried to use other methods to examine the relationship among variables. For example, we tried to utilize regression analysis with per capita annual income as a dependent variable and other social, economic, demographic indicators as independent variables. The regression analysis was calculated separately for Lhasa and rural areas. The result of this analysis was not as insightful as expected. After all the steps we went through to exclude those variables with unsatisfactory statistical significance, only one independent variable remained significant. The final regression equation is as follows:

Lhasa: Income = 636.6 yuan + 216.6 yuan $*$ Edu (achievement);
($R^2 = 0.0180$, $F = 9.590$, Sig. $F = 0.0021$).
Rural Areas: Income = 534.7 yuan + 39.6 yuan $*$ Year (in school);
($R^2 = 0.0161$, $F = 9.146$, Sig. $F = 0.0026$).

The equations provide some basic and useful information. The total annual income of the residents in the old urban area of Lhasa is basically 102 yuan higher. Illiterate rural respondents earn 534.7 yuan per member of their households while illiterate Lhasa residents earn 636.6 yuan per member of their households. This is the significance of the constants and the difference between them.

Since many rural residents did not complete primary school but did spend some years in school, the achievement (measured by grade of graduation) lost its significance; years in school is a meaningful variable. The first equation indicates that when people in Lhasa achieved a higher education in school, their household earned 216.6 yuan more annually per member. The second equation indicates that when rural residents studied in school for one additional year, their household earned 39.6 yuan more per member.

The regression once again proves the positive correlation between education and income in Tibet. There are many factors that allow people to improve their incomes, but in general, spending more years in school and getting a higher education is the most reliable way to do so. This is why other variables (age, gender, place of birth, registration status, religion, occupation, industry, etc.) lost their statistical significance in regression. Some of these variables worked for one group of people, but not for others. Some other variables worked for another group, but not for this one. Only education remains significant for all rural and urban respondents in the regression analyses.

Conclusion

When we conducted the 1988 survey in the TAR to study income and consumption patterns of rural and urban residents, we faced two problems. The first problem was the lack of research literature or statistical data to which we could refer. The first statistical yearbook, edited by SBT, was published only in 1989. There were almost no sociological or economic studies on Tibet at a micro-level. Some publications on Tibet just briefly described some social and economic phenomena without detailed citations or evidence.

The second problem was that there was no feasible analysis model that could be used in this quantitative survey. Sociology and economics in the west do have some theoretical frameworks for individual and group consumption (Smelser, 1963: 98; Johnassen, 1960; Samuelson and Nordhaus, 1998: 410–429). These frameworks are

either too theoretical for quantitative analysis, or need a lot of systematic statistical data from the past and the present, conditions that do not exist in Tibet. Also these theories and models are mainly based on the experiences of western societies that are different from the realities in Tibet.

Therefore, we had to refer to some basic theories of social development and design the questionnaires based on our own research experiences in other areas of China, such as Inner Mongolia, Xinjiang and Gansu. Based on the above detailed discussions of our survey data, it might be helpful to summarize a model for analysis of income and consumption patterns in the TAR and identify the factors affecting people's income and consumption behavior.

Figure 7.1 is the model for analysis of the factors affecting individual income and consumption in people's life cycle. Since the rural/urban variable affects all factors in this model, it is not included. Education, occupation, income and consumption are four key variables in this rough analysis model. The variables in the large dotted-line rectangle represent individual factors. The variables outside it are family/community/societal factors. Those above the large rectangle (schools, work units, distribution/market policy) are formal institution/policy factors, while those under the large rectangle (family, community) are informal factors. The impact between variables and the direction of the impact is shown in arrows. Strain arrows indicate direct and stable impact while dotted-line arrows show indirect and flexible impact. In the following discussions, this model will be used to summarize the results found in our survey.

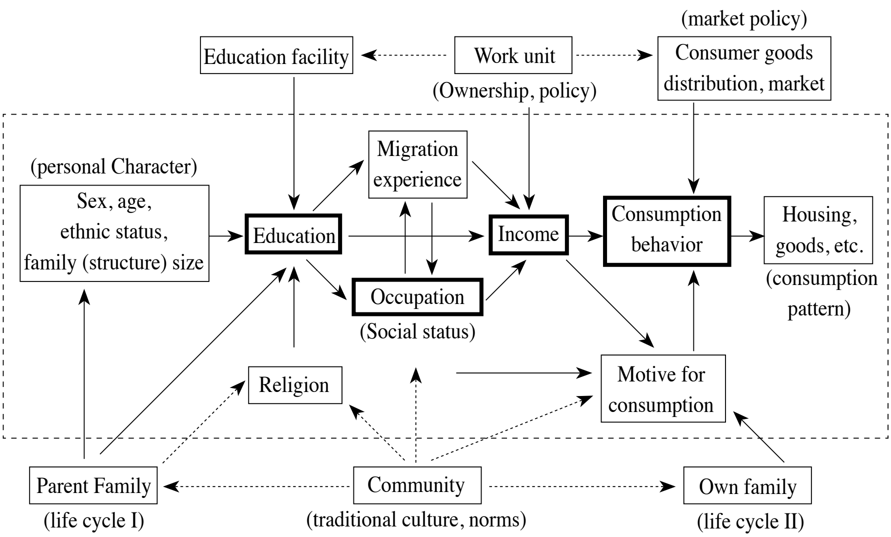


Figure 7.1. The Model for Analyzing Factors Affecting Individual Income and Consumption

1. Individual characteristics of residents (ethnic status, gender, age, family size) in the old urban area of Lhasa did not differ significantly from those of rural respondents. In both cases the population was ethnic Tibetans. The gender and age differences between rural and Lhasa respondents can only represent the situation of household heads; they do not necessarily mean real structural differences between the two groups.
2. Various statistical methods proved the significant impact of education on occupation and income in both urban and rural areas. Lhasa residents obviously received more education than did rural residents, reflecting a rural-urban gap in school facilities. Gender and age are two factors that affected people's educational achievement.
3. The per capita income of Lhasa respondents was as much as twice that of the rural respondents. This rural-urban gap is much larger than in nearby provinces and even the national level before 2003. In 2002 the difference between the disposable income per capita of urban residents and income per capita of rural residents was 6,241 yuan in TAR, compared with 4,561 yuan in Gansu, 4,502 yuan in Qinghai, 5,036 yuan in Xinjiang, and 5,227 yuan for the whole of China (SBT, 2003: 335). Besides, the income differentiation among urban residents is also more serious than that among rural residents.
4. New policies for land ownership and market regulations changed the whole picture in villages. Peasants increased their incomes and standard of living. An important indicator is the improvement in their housing. After the new household responsibility system was put into practice, more than 70 percent of rural respondents built new houses.
5. The income sources in both Lhasa and the rural areas were diverse in 1988. An unusual characteristic of Lhasa when compared with other cities in China is that 40 percent of its residents are not associated with government institutions. Another characteristic is that 38.5 percent of its residents are reported as unemployed.
6. The level of income determines the level and structure of consumption. This is true in the TAR as it is everywhere. But because some key consumer items (especially housing) with regard to distribution and market structure are still largely affected by the government and a planned economy, the income of Lhasa residents has a limited impact on obtaining these items.
7. The living conditions of rural residents, with regard to both the quality and space, are obviously better than that of residents in the old urban area of Lhasa. Poor and crowded living conditions are one of the most important complaints of Lhasa residents to the government.
8. Apart from education, we found the ownership of their work units also affected people's income, for different occupations, but also for the same occupation. The state-owned, collective enterprise or united households units formed a ladder of income with obvious differences.

9. Different geographic characteristics, living environment, economic activities and lifestyle had some impact on people's consumption. There are different consumption patterns between rural and urban households where expenses and selection of consumer goods are concerned.
10. There were no variables or questions designed in this survey to measure or identify the impact of community on individual consumption. But we feel in interviews that local community members did share some preferences in their consumption (e.g. in the style and size of houses they built).
11. The impact of religion on people's income (their participation in various economic activities) and consumption needs further study. The survey covered religious beliefs and donations to monasteries but only superficially. Respondents were simply asked, "How many times do you visit monasteries annually?" and "How much money did you donate to monasteries last year?" The researchers in rural areas were local Tibetan cadres who attended a training program in Lhasa. The researchers in urban Lhasa were Tibetan students from Tibet University. It is possible that rural Tibetans pay fewer visits to monasteries and donate less money than Lhasa residents do because urban Lhasa residents are generally richer and it is more convenient for them to visit monasteries.
12. A portion of the respondents did not live in the place where they were born. This reflects their geographic mobility and migration experiences. Peasants have lower mobility than urban residents, and mobility is connected to their educational achievements and occupations. The 1988 survey covered only a part of the old urban area in Lhasa ("unit households" in old urban areas were excluded). It presents only part of the picture. Residents in unit households and temporary migrants in Lhasa are two important groups that need further study in order to obtain a whole picture of Lhasa.

In summary, rural-urban differences in the TAR used to be larger than at the national level, and these differences have special, even unique characteristics. Since 1959, the political system, social structure and economic structures of Tibet have gone through many fundamental changes. In the past five decades Tibet has experienced four periods of social transition. In the first period it was transformed from a traditional Middle Ages-style religious regime with a trinity social structure (social system of estate-serfdom, economic system controlled and led by religious groups, and a theocracy) to a "new democratic" system (equal rights for all citizens, property distributed to serfs and slaves) through the land reform. In the second period, a commune system (collective ownership of land and animals) in rural areas and a planned economy system in urban areas was introduced into Tibet according to communist ideology of the time. The third period was the Cultural Revolution, and Tibetans suffered, as did others in China, as monasteries were destroyed and traditional culture was heavily repressed.

The fourth period is the system reform toward a market economy that began in the 1980s. Communes were disbanded, and peasants and herdsmen received their equal share of commune property, allowing them to work on their own lands and pastures with their own animals. Private business was allowed and even encouraged, religious freedom was reclaimed and monasteries were re-built. There have been many social, political, economic and cultural changes in Tibetan society in a short period of time, and both rural and urban areas in the TAR played different roles in these processes, representing different facets of social transition.

In our study, we noticed that a portion of the urban residents still retained some ideas and customs from peasant society. Meanwhile, rural areas have developed quickly and the lives of peasants have greatly improved. As the political, economic and cultural centers, cities have had a high concentration of social differentials, disharmony and tensions — especially Lhasa. The differences between rural and urban residents with regard to their income and consumption patterns can only be understood within this context of the history of social transition.

8

Tibetan Spouse Selection and Marriage

Family is the basic unit of human society and families are formed through a variety of marriage patterns. By studying marriage patterns and family formation we can discern the fundamental models and networks of human organization as well as social stratification and mobility within a society. The norms and values of societies and communities also can be determined in an indirect way through examining patterns of spousal selection. This is why marriage and family studies are so important to the field of sociology.

After a brief review of the relevant literature on Tibetan marriages, this chapter will concentrate on an analysis of our 1988 survey data with urban-rural comparisons. In addition, this chapter will address the issue of intermarriage, an important aspect of ethnic relation studies (Gordon, 1964: 70) that is seldom touched upon by other Tibetan studies.

The Literature on Tibetan Marriage Practices

Early writings about Tibetan marriages

In general, the literature on family and marriages in Tibet can be divided into three groups. The first group appeared before the 1950s. The earliest reports on marriages of Tibet, especially polyandry, were provided by western missionaries, geographic explorers and diplomats, as well as by the Chinese officials, monks and scholars who traveled to Tibet. Polyandry as a marriage type is mainly concentrated in Tibet and other Himalayan regions. This uncommon form of marriage has always attracted the curiosity of missionaries, diplomats and scholars.

As the British Political Representative in Tibet, Bhutan and Sikkim, Sir Charles Bell visited Tibet and had personal communications with Tibetans, including the 13th Dalai Lama. He was among the first group of Westerners who

provided personal observations and some information about Tibetan society. In his book *The People of Tibet* (1928), he wrote, "Monogamy, polygamy, and polyandry are all found in Tibet . . . Polyandry is frequently practiced by both farmers and herdsmen." For the structure of the marriage types, he was informed by Tibetan officials that "in the province of U out of every 20 households one might say that 15 would be monogamous, three polyandrous, and two polygamous. In the northern Plains he estimated the proportions at 10 polyandrous, seven monogamous, and three polygamous (Bell, 1928: 192–194)." He found that fraternal polyandry was the most common type of polyandrous marriage in Tibet. "Where polyandry holds, the husbands are brothers . . . Having married one of the brothers in a family, the wife also married the other brothers who are younger, but not any that are older than him (Bell, 1928: 192)." Another type of marriage in which a man joined his wife's family, lived on her family's property and took her family's surname was also described (Bell, 1928: 176).

Rolf Alfred Stein described marriage patterns of Tibetans in *La Civilisation Tibetaine* (1962). He concluded that "the most typical marriage type seems to be polyandry. It is popular almost anywhere among both agricultural population and herdsmen, it just did not appear in *Amdo* [Qinghai] (Stein, 1962 [1982: 93])." In *Ethnographic Atlas* (1969), the Tibetan areas were identified as the region with the highest rate of polyandry in the world (Murdock, 1969).[1] In *Origin of Family, Private Ownership and State*, Friedrich Engels also mentioned polyandry in Tibet and India as "an exception" in marriage types (1884: 58).

Marriage patterns in Tibet were also described by some Han Chinese who had traveled to Tibet. For example, *Sichuan Tongzhi: Xiyu Zhi* (General Chronicle of Sichuan: Western Frontier), published in 1816, described the customs of polyandry among Tibetans in western Sichuan (Kham). "Popular local opinions (in western Sichuan) looked down on monogamous marriages and preferred woman to marry brothers, three or four if necessary, for household harmony. In several areas of Litang, women must wear silver hairpins with the number of hairpins indicating the number of her husbands. If people see a woman with three or four hairpins they know that she is married to several brothers (Chen Qingying, 1995: 418)." Two Kuomintang officials in Lhasa also reported that "polyandry, of the type in which several brothers share one wife, is a popular form of marriage in Tibet (Shen, Tsung-Lien and Liu, Shen-Chi, 1953: 142)."

It must be pointed out that all information provided by literature in the first group was based on personal observations and conversations with Tibetans and there was no scientific research on marriage in Tibet by westerners or Chinese. These reports, though simplistic and often contradictory, introduced the marriage patterns of Tibet to the outside world for the first time.

Research from the 1950s to 1970s

The second group of literature consisted of reports from the 1950s to 1970s based on field research on marriages. Those reports were either published in China or in the West.

In the 1950s the Chinese government organized a series of research projects in the ethnic minority areas. The purpose of this research series was to chart the historical and social changes in the communities of the various ethnic minority groups. The materials were used to identify the "mode of production" and analyze "social classes" in minority communities. Some reports described local marriage patterns. These reports were re-edited by the Tibet Social and Historical Survey Series Editing Group (TSHSSEG) and published as a part of the *Five Ethnic Minorities Series* in the 1980s.

Chinese-language publications began discussing Tibetan marriage and family patterns from the 1980s. Some research was based on historical records and the surveys conducted in the 1950s, for example *Tibetan Marriages and Families in Tibet before the "Democratic Reform"* (Wu Chongzhong, 1991: 480–499). The reports about the 1950s' survey in Tibet were released in the 1980s and were followed by studies of these materials. These studies explored traditional marriage patterns in Tibetan society and discussed the social and economic circumstances that allowed these patterns to emerge. But in general, these studies were still guided by Marxist evolutionism and ideological frameworks. One said that "polyandrous marriage in Tibet is the residual of an ancient marriage system (Ou Chaoquan, 1988: 83)." Others emphasized that "special types of marriages in modern Tibetan society were neither the residual of primary group-marriage systems nor the base of modern family and marriage patterns in Tibet, these were the results of feudal serfdom in Tibet (Zhang Quanwu, 1986: 99)." "In general, Chinese scholars and popular sources . . . have seen Tibetan polyandry as primitive, abnormal, immoral and backward (Ben Jiao, 2001)."

Meanwhile, some field research notes and statistical data are still useful today for an insight into Tibetan society in the 1950s. Information about marriages from the TSHSSEG reports and other literature are presented in Table 8.1.

From this table we notice that monogamy was by far the main type of marriage in most areas of Tibet in the 1950s and 1960s. Polyandry was second in terms of number and in 1958 one-third of marriages in *Liu shika*[2] were polyandrous. In contrast, polygamy existed in many places but usually less than 10 percent of marriages were polygamous, with the exception of special cases (e.g. *Thoji shika,* Lhatse County). Similar marriage patterns can be seen in other Tibetan-inhabited areas outside the TAR. For example, in the Muli Tibetan autonomous county (Sichuan Province), "polygamy and polyandry . . . comprised over 30 percent of the total marriages during the Ming and Qing dynasties, even over 20–30 percent in 1956 (Wu Wen, 1984: 43)."

Table 8.1. Survey Results of Marriage Types in Tibet

Survey site & date	Total		Monogamy	Polygyny	Polyandry	2 husband & 2 wives	Other*
The surveys in the 1950s	marriage	%	%	%	%	%	%
1. Kormang tribe, Nagchu Dzong (1957)	127	100.0	95.3	0.0	1.6	0.0	3.1
2. Lhoma Rangshog tribe, Nagchu dzong (1958)	54	100.0	92.6	5.6	1.8	0.0	0.0
3. Wapa tribe, Nagchu County (1961)	267	100.0	84.6	4.9	10.5	0.0	0.0
4. Nangselin *shika,* Danang County (1958)	104	100.0	84.6	5.8	9.6	0.0	0.0
5. Xanieru, Khangmar County (1962)	104	100.0	75.0	0.0	25.0	0.0	0.0
6. Thoji *shika,* Lhatse County (1958)	44	100.0	79.5	11.4	9.1	0.0	0.0
7. Liu *shika,* Lhatse County (1958)	122	100.0	60.7	2.4	32.0	0.0	4.9
8. Tselong *shika,* Lhatse County (1958)	76	100.0	40.8	7.9	31.6	6.6	13.2
9. Xaminpa Village, Songpan County (1952)	21	100.0	81.0	0.0	19.0	0.0	0.0
10. Tangke Tribe, Hongyuan County (1952)	63	100.0	88.9	0.0	11.1	0.0	0.0
11. Xog *xiang,* Chongye dzong (1959)**	188	100.0	97.9	1.6	0.5	0.0	0.0
12. Changchen xiang, Chongye dzong (1959)**	97	100.0	-	-	3.1	-	-
13. Ju xiang, Chongye dzong (1959)**	70	100.0	-	57.1	-	-	-
The surveys since the 1980s							
14. Changchen xiang, Chongye dzong (1987)**	160	100.0	-	3.1	-	-	-
15. Various areas in the TAR (1988)***	753	100.0	85.0	1.7	13.3	0.0	0.0
16. Rural areas in Chamdo (1997)	38	100.0	50.0	5.3	36.8	0.0	7.9
17. Guer *xiang*, Gonggar County (1998)	800	100.0	96.0	-	4.0	-	-
18. Markham County (1996)	10,875	100.0	-	-	42.3	-	-
19. Six *xiangs*, Gongjo County (1999)	4,753	100.0	-	-	67.3	-	-
20. Mag *xiang*, Panam County (1996)	105	100.0	54.3	15.4	30.5	3.8	0.0
21. 4 townships, Lhasa and Shigatse(1997–2000)	1,060	100.0	81.6	1.9	15.8	-	0.7

* "Other" mainly refers to "formal concubine" with separate residence.
** The survey was conducted in 1987 but recorded the marriage situation in 1959 (before the land reform).
*** The survey taken by Tibetan University students during their summer vacation in their hometowns.

1. 2. 3. TSHSSEG, 1987c: 13, 49, 219.
4. TSHSSEG, 1987b: 157.
5.: TSHSSEG, 1988a: 218.
6. 7. 8. TSHSSEG, 1988b: 113, 317, 595, 597.
9. 10. Ou Chaoquan, 1988: 81.
11. 12. 13. 14. China Tibetology Research Center, 1992: 164–165.
15. Wang Daben, et al. 1993: 45.
16. Wang Wenchang, 2000: 56.
17. Gyaltsen Tseten, 2000: 12.
18. 19. Lu, Changlin, 1999: 55.
20. Ben Jiao: 2001: table 5.8.
21. Goldstein, et al. 2002: 22.

Apart from the three major types of marriage (monogamy, polygyny, polyandry), there were some other kinds of marriages among Tibetans. *The Survey Report of Tselong Shika, Lhatse County* revealed a marriage between "two husbands with two wives . . . Two men married two women and lived all together . . . In this case the two wives are blood sisters (TSHSSEG, 1989c: 592)." *The Survey Report of Liu Shika, Lhatse County* described another type of marriage, *sumo*, in detail. "The woman who is openly living with a man who already has a wife is called *sumo* (*wai-shi* in Chinese), which means a woman standing aside. The status of the woman in this relationship is different from that of a lover because her man has put "jade jewelry" in her *bazhu* (head ornaments) and as a consequence her relationship with that man is publicly recognized. All these *sumo* are single women (TSHSSEG, 1989c: 320)." This relationship was similar to concubinage in the Han regions. But in most of those instances concubines lived with their husbands and formal wives while *sumo* and her children lived separately. This relationship should be considered a form of marriage and not an extramarital affair. But it is very likely that this type of marriage was, in the past, classified as "the family with a mother and children but without a father (TSHSSEG, 1989a: 13)" or "the family without a marriage (TSHSSEG, 1988: 157)." It is also possible that these women were counted as single women.

Even among these major types of marriage a distinction should be made about bride(s) who live in the house of the groom(s) and cases in which groom(s) live in the house of the bride(s). There are some significant differences such as power over property and children within the family, and status in community. In Ju *xiang* of Chongye *dzong*, among 70 households interviewed, 41 were cases in which grooms lived in their brides' houses. "Among the 41 households, 39 were cases where a husband married two sisters, one household had a husband who married three sisters, and another was monogamous. The reason for such marriage patterns was that all these families were serfs (*tre-ba*) of the Riwo Deyin Monastery. Because many males had to become monks there were fewer men left to marry. Therefore many households recruited a single man to be the groom for more than one daughter. The oldest sister became the first bride, then the younger sisters became his wives later (CTRC, 1992: 165)."

Based on reports from field surveys, polyandry and polygyny can be arranged into several sub-types: brothers sharing one wife, father and son sharing one wife, uncle and nephew sharing one wife, friends sharing one wife, sisters sharing one husband, mother and daughter sharing one husband, aunt and niece sharing one husband, female friends sharing one husband, etc. But fraternal polyandry has been the main form of polygamous marriage in Tibet. Based on the reports of the TSHSSEG, several observations about Tibetan marriage patterns can be made:

1. Tibetans basically followed the principle of "in-class marriage (people marrying within the same social class in a local hierarchy)" and "out-kinship marriage (people marrying outside their blood kinship)." In addition, there were many types and sub-types of marriages among Tibetans in different areas.
2. Monogamy, polyandry and polygyny are three major forms of marriage among Tibetans, but there are other types of marriage in small numbers as variants of or complements to the three major types. Fixing exclusively on three major types and ignoring the others will prevent us from understanding not only the entire picture but the three major types in depth as well.
3. There are great regional variations when it comes to marriage in the Tibetan-inhabited areas. The regional variations were associated with factors such as major economic activities (agriculture, animal husbandry), population density (available resources), types of economic organization (ownership, proportion of serf stratification), and the role of the monasteries in the local communities. Since sociology and anthropology as academic disciplines were dismissed in 1952 and re-introduced into China in the 1980s, the studies by Chinese scholars during this period are mainly descriptive and seldom refer to the western publications.

Some Western scholars, mostly anthropologists, started in the 1950s to study Tibetan marriages, however. Because they could not enter Tibet at that time, they went to Tibetan-speaking communities in Nepal and India instead.

Barbara Aziz conducted her field survey in a D'ing-ri Tibetan community in Nepal from 1971 to 1972. Of the 430 Tibetan households she interviewed, 122 (28.4 percent) were either polygamous or polyandrous. The structure of these 122 households was as follows: fraternal polyandry (80), sororal polygamy (14), unrelated males sharing a wife (2), unrelated females sharing a husband (8), father and son sharing a wife (8), mother and daughter sharing a husband (10) (Aziz, 1978: 139).[3]

Barbara Aziz found some strict exogamy restrictions among these Tibetans. "The rules of exogamy declare anyone who is a kin is ineligible as a marriage or sexual partner, and anyone who is not a kin is a potential mate . . . Whereas people express abhorrence at the idea that they might have sexual relations with a kinsperson, they delight in the idea of having access to the spouse of a kinsperson (Aziz, 1978: 137)." This is very different from Han customs. Han Chinese would delight in having marriages between cousins, but could not accept other relatives (especially in blood relations such as father-son, mother-daughter) sharing the same spouse. It reflects the different social norms between Han and Tibetans in regulating relationship between generations ("*Xiao*," filial piety, is the most important moral norm in Confucianism), relatives and friends. In contrast, Tibetans evaluated these marriages positively. "When they cite polygamous marriages, Tibetan do so

as a recognition of success. They praise partners for not being jealous," and such marriages can keep the household prosperous. "Almost all of these occur in the wealthiest households of a village (Aziz, 1978: 139,143)."

Based on his field work among Tibetan communities in India and Nepal, and later in Tibet, Melvyn Goldstein proposed a so-called socio-economic explanation of Tibetan fraternal polyandry. Goldstein suggested that marriage patterns should be studied in relation to the system of stratification and land tenure. To a household, whether or not it engaged in a polyandrous or monogamous marriage depended upon two factors. The first was the status of the individuals or households in social stratification and land tenure. There were two major groups of serfs in Tibet: *tre-ba* and *du-jung* had different statuses concerning land tenure, paying tax as a household if they were the former and as individuals if they were the latter. The second variable was the gender ratio in a generation (the number of males and females). Based on his studies, Goldstein summarized two key characteristics of marriages among Tibetans: marriage patterns varied by social class and the wealthier *tre-ba* households were committed to a single marriage per generation, a situation he termed a "monomarital principle." This commitment resulted in stem families that sometimes took the form of polyandry (Goldstein, 1971: 68). The Tibetan "monomarital principle" also includes a wide range of other marriage forms such as patrilocal monogamy, matrilocal monogamy, some forms of polygyny and bigenerational polyandry (father and son with a joint wife) depending on the gender structure of the next generation of this family (Goldstein, 1971; 1978; and 1987; Ben Jiao 2001).[4]

Nancy E. Levine carried out her field survey on polyandry in Nyinba (a Tibetan-speaking community in Nepal) from 1973 to 1975 (Levine, 1988). She also conducted a survey in Kham area in the 1990s. She found that in practice, polyandry was frequently accompanied by an "informal union" of sexual relations. Among the brothers married to the same women, one or more might have other single women as "informal partners." They visited these women regularly, provided financial support and covered expenses related to these relationships, but the children from these unions had no inheritance rights from their fathers. The unmarried sisters of these brothers often lived with them and also had their own "informal unions." This arrangement was called a "sibling household." It is explained by a "low valuation of marriage and distrust of in-laws" among Tibetan peasants. Noting that "sibling co-residence" and "informal union" have become popular in some rural areas in Tibet since the 1990s, Nancy Levine concluded that "they are far more common now than in the past and no longer serve as an index of landlessness or poverty (Levine, 1994: 478)." It should be clarified that "sibling co-residence" exists only in Ngari and not in other parts of Tibet. In explaining polyandry, Nancy Levine suggests that there is a stronger cultural value and cultural preference among Tibetans for polyandry than reported by Goldstein. But as Ben Jiao pointed out, "her explanation, however, has many problems, including inconsistencies in her own data (Ben Jiao, 2001)."

Studies of "Revival of Polyandry" since the 1980s

The third group of literature consists of recent research publications in both China and in the west. Forms of marriage in Tibet other than monogamy were criticized after 1959, especially during the Cultural Revolution, as "primitive and backward." Monogamous marriages became popular among the young generation of Tibetans under the commune system in rural areas and government arranged "planned" economy in urban areas.

But the situation started to change again after the 1980s, when communes were dismantled and a new "household responsibility system" established in Tibet. Then people noticed that polyandry became popular again, especially in pastoral areas. Some surveys in the late 1990s have found very high percentages of polygamy in areas within Tibet (Lu Changlin, 2000: 55). Both scholars in China and the west are eager to learn what is behind the revival of polyandry in Tibet. Since the old estate-serf system was abolished, those conditions related to the old land tenure or property-ownership system have disappeared; the factors leading to polyandry seem also to have gone. So what is the incentive stimulating the revival of polyandrous marriages?

First, some studies have tried to measure the scope of development of polyandry. They analyzed the basic structure and characteristics of Tibetan marriages based on census data. Examples of these are *Analysis of Marriages of the Tibetan Population* (Wu Jianhua, 1992: 145–157) and *Characteristics of Marriage and Family in the Population of the TAR* (Cai Wenmei, et al, 1992: 167–179). Another example is *Marriage and Childbearing of Tibetan Women in the TAR* (Wang Daben, et al, 1993: 44–52). The author was a teacher at Tibet University, where he organized his students to carry out an interview survey in their hometowns during school vacations. Based on questionnaires for some 700 respondents, the study analyzed marriage patterns, age at first marriage, geographic range of spousal selection and the marriage decision-making process. Polyandry comprised 13.3 percent of marriages in the survey undertaken by the Tibet University students in 1988. These studies examined marriage structure, age differentials between husband and wife, and rates of non-marriage, divorce and widowhood, but they did not provide convincing explanations for the revival of polyandry.

A study conducted by Ben Jiao is the most recent in-depth community study on fraternal polyandry. He conducted his field survey from 1996 to 1998 in Panam County (Shigatse Prefecture) on fraternal polyandry. As the most recent and most in-depth field survey on polyandry, his doctoral dissertation (2001) provides a systematic review of relevant literature as well as social changes that have taken place in this local community since the 1950s.

In the community he studied, only four percent of farmer households remained polyandrous under the commune system. The percentage increased to 34 in

1998. Based on intensive interviews with 92 households in the village, the major conclusions Ben Jiao reached were: (1) Although polyandry fell in the 1960s and 1970s under the commune system, Tibetan farmers still prefer polyandry when they have the right to manage their household land and labor under the new system. (2) Because of high fertility and limited arable land, the population increased 33 percent from 1981 to 1996 while arable land per capita fell by 24 percent. This forced households to find a way to survive, and one traditional way was to diversify household economic activities (to animal husbandry or non-agricultural activities such as transportation or trade) based on polyandry. (3) The result was that 54.8 percent of polyandrous households "were in the upper middle and wealthy social strata." (4) Therefore, Ban Jiao's findings provide detailed evidence that supports the socio-economic hypothesis of polyandry (Ben Jiao, 2001). In another paper jointed published by Melvyn Goldstein, Ben Jiao and others, 15.8 percent of their total 1,060 ever-married Tibetan women were polyandrous (Goldstein, et al, 2002: 22). These studies show an obvious revival of polyandry in both agricultural and pastoral areas in Tibet.

It must be said that thus far there have been only limited systematic or large-scale studies focusing on marriages in Tibet. The lack of research literature and historical materials makes the study of marriage dynamics in Tibet very difficult to conduct in a systematic and longitudinal way. Chinese scholars have only been permitted to carry out social science research since the 1980s for political reasons. This explains why there have been so few large social surveys in Tibet that focus on marriage and family in recent years.

Marital Status of Interviewed Respondents in the 1988 TAR Survey

The questionnaire of the 1988 survey conducted by ISA and CTRC had 17 questions directly related to marriage. These data provide some basic information on marital status, the position of the bride and groom at the time of the wedding, and the circumstances of a first marriage for those who married more than once. But a great deal of additional content in our questionnaire (income, occupation, education, etc.) has not been covered by other marriage studies. Therefore, this study might provide some information about the correlations between marriage and socio-economic factors, and the information might be useful for future studies of marriages and families in Tibet.

Among the respondent household heads in urban Lhasa, 60.8 percent were women, compared with 24.7 percent in the rural areas. Lhasa household heads were nine years older than rural household heads on average. This age difference should be kept in mind when marriages were compared between urban and rural household heads because marriage patterns might differ by age. The educational achievement,

occupational structure, and residential status of the respondents were discussed in Chapter 5. In general, our Lhasa respondents may represent all native urban residents in the TAR, and our rural respondents may represent all rural residents in the TAR. Some nomads who live in remote areas in the northern plateau might be different from our respondents, but they are small in number.

There were eight Han households and 13 Hui households in our sample. In order to concentrate on Tibetans, these 21 households are excluded from the following discussions. Table 8.2 compared the 1990 census data on the marital status of all residents aged 20 or above in the TAR and our 1988 survey data on marital status for Tibetan household heads. Because our data did not include other household members (some of whom were also married) and the average age of our household heads was 52.8 in Lhasa and 43.8 in rural areas, our data would correspond to the older generations in the census data. In contrast, the average age of the respondents covered by the census was 29.4.

Table 8.2. Marriage Status of Rural-Urban Residents in the TAR (1988, 1990)

		Single	**Marriage status of married persons (%)**				
		in total %	With spouse	Divorced	Widowed	Total	Total #
1990 census	City	22.4	94.7	2.3	3.0	100.0	79445
(Total population	Town	24.4	93.7	2.6	3.7	100.0	62334
Above age of 20)	County	25.6	90.6	3.4	6.0	100.0	550083
	Total	25.1	91.4	3.2	5.4	100.0	691862
1988 survey*	Lhasa	10.2	78.6	4.0	17.4	100.0	552
(Tibetan	Counties	11.6	87.9	3.1	9.0	100.0	555
household heads)	Total	10.9	83.3	3.5	13.2	100.0	1107

* The percentages were “unmarried” and “married” in total interviewed household heads.

The age difference between the respondents to our survey and the census data may explain the higher widowhood rates in our survey (13.2 percent vs. 5.4 percent). Besides, the age difference between urban and rural respondents in our 1988 survey (nine years) also may explain a higher widowhood rate of Lhasa household heads compared with rural household heads (17.4 percent vs. 9.0 percent). The higher rates of single people in the census data are also due to the age factor. The city had a relatively lower rate of singles compared with that of towns and rural counties. It seems that urban people married younger than did rural people. This is different from our previous assumptions. If it is not true, the only explanation is that the generally longer life for urban residents generates a higher proportion of older people in the population, and most of this population is not single.

The data in Table 8.3 confirmed the preference of Lhasa residents to have women as household heads since 66.7 percent of these female household heads lived with their husbands. The percentages of divorce are similar for rural and urban respondents (3.5 percent vs. 3.4 percent). Considering the age difference of 18.9 years, this might suggest a much higher divorce rate among the younger generation of Tibetans.

Table 8.3. Marriage Status of Interviewed Tibetan Household Heads (1988)

		Lhasa				**Counties**			
		Male head		Female head		Male head		Female head	
		Household	%	Household	%	Household	%	Household	%
Marriage status	Single	34	12.3	29	8.6	36	7.7	37	23.1
	Married	208	75.4	226	66.7	402	85.9	86	53.8
	Divorced	6	2.2	16	4.7	8	1.7	9	5.6
	Widowed	28	10.1	68	20.0	22	4.7	28	17.5
	Total	276	100.0	339	100.0	468	100.0	160	100.0
Numbers of times married	None	34	12.3	29	8.6	36	7.7	37	23.1
	Once	219	79.3	264	77.9	397	84.8	112	70.0
	Twice	23	8.3	44	13.0	31	6.6	11	6.9
	> 3 times	0	0.0	2	0.5	4	0.9	0	0.0
	Total	276	100.0	339	100.0	468	100.0	160	100.0
Type of marriage	Monogamy	240	99.2	308	99.4	379	87.7	115	94.5
	Polygyny	1	0.4	1	0.3	24	5.6	4	3.3
	Polyandry	1	0.4	0	0.0	15	3.5	4	3.3
	Unknown	0	0.0	1	0.3	14	3.2	0	0.0
	Total	242	100.0	310	100.0	432	100.0	123	100.0
Registration status	Registered	116	47.9	113	36.5	164	38.0	49	39.8
	Unregistered	111	45.9	179	57.7	252	58.3	69	56.1
	Unknown	15	6.2	18	5.8	16	3.7	5	4.1
	Total	242	100.0	310	100.0	432	100.0	123	100.0
Ethnic status of present spouse (including divorced but un-remarried)	Tibetan	227	93.8	297	95.8	429	99.3	116	94.3
	Han	14	5.8	10	3.2	3	0.7	7	5.7
	Others	1	0.4	3	1.0	0	0.0	0	0.0
	Unknown	0	0.0	0	0.0	0	0.0	0	0.0
	Total	242	100.0	310	100.0	432	100.0	123	100.0
Ethnic status of first marriage	Tibetan	20	87.0	41	89.1	32	91.4	10	90.9
	Han	3	13.0	3	6.5	0	0.0	1	9.1
	Others	0	0.0	0	0.0	0	0.0	0	0.0
	Unknown	0	0.0	2	4.4	3	8.6	0	0.0
	Total	23	100.0	46	100.0	35	100.0	11	100.0

Among the Lhasa respondents who said they were divorced or widowed, 34 were male household heads (12.3 percent of total male heads) and 84 were female heads (24.8 percent of total female heads). It seems that urban women were more hesitant to remarry than men after a divorce or the loss of their spouses. The number of rural women who remained divorced or who were widowed was 37 (23.1 percent of total female heads) while the men in these two categories numbered 30 (6.4 percent of total male heads). It seems that rural men remarried more quickly than urban men while rural females shared the same cautious patterns as their urban counterparts.

If we look at the number of marriages per person we may get a more reasonable explanation. If the single household heads are excluded, 9.5 percent of male Lhasa household heads and 8.1 percent of rural male heads married at least twice; the rural-urban difference was small. For women, 14.8 percent of urban female heads and 8.9 percent of rural female heads married at least twice. It seems, therefore, that women in Lhasa had a greater possibility of getting remarried than their male equivalents or their rural female counterparts. This is in contradiction to what we discussed above. But the data concerning multiple marriages is essential to calculating remarriage rates. Marital status is only a current situation, and it doesn't tell us anything about whether or not there had been previous marriages. Combining the information on marital status and number of marriages we come to an explanation that urban marriages were not as stable as rural marriages, that there was a higher proportion of urban females to rural females who married twice although they were divorced and widowed in similar proportions.

There might be two reasons for less marriage stability: there is greater geographic mobility in urban Lhasa than in rural areas and Lhasa has more migrants, and there is a large proportion of unemployed and self-employed people in Lhasa who have no stable occupations. More frequent traveling would separate husbands and wives, and unstable occupations would result in unstable incomes. The instability in residence, income and social status, as well as spouse separation, is likely to result in the instability of families and increase the possibility of divorce.

Marriage Practices in the TAR

A total 1,092 interviewed household heads reported their marriage situation, including rural-urban residents of both genders. About 95.4 percent of them were monogamous marriages, 2.7 percent were polygamous, and 1.9 percent were polyandrous marriages (Table 8.4). Most of the polygynous and polyandrous marriages were found in the rural areas. But we did find some cases in Lhasa. These results probably represent basic marriage patterns in Lhasa, Shigatse and Lhoka areas that are the most populated along the middle reaches of the Tsangpo River.

Table 8.4. Comparison of Two Surveys in the TAR in 1988

Marriage type	Tibet University Survey 1988 *			Peking University Survey 1988		
	Rural	Urban	Total	Rural	Urban	Total
Monogamy	83.4	100.0	85.1	91.3	99.4	95.4
Polygyny	1.9	0.0	1.7	5.2	0.4	2.7
Polyandry	14.7	0.0	13.2	3.5	0.2	1.9
Total (%)	100.0	100.0	100.0	100.0	100.0	100.0
Total households	680	73	753	541	551	1092

* Source: Wang Daben, 1993: 45.

The Tibet University students who conducted marriage surveys during their summer vacations in 1988 returned to their hometowns and interviewed households in their local communities and found a higher percentage of polyandry (14.7 percent) and less polygyny (1.9 percent) in rural areas compared with our 1988 survey. They also found only monogamy being practiced in the cities and towns. Because some of their survey sites were in pastoral areas in Nagchu (a prefecture in northern TAR), this result partly represented marriage patterns in pastoral areas. A comparison between the results of our survey and that of the Tibet University survey of the same year confirmed the regional variation in marriage described in early literature.

From both surveys, it is clear that monogamous marriages are dominant in urban areas in the TAR and polyandrous marriages are common in rural areas. Polyandrous marriages have existed in Tibet for centuries and continue to be practiced among Tibetans. "According to a questionnaire survey conducted by Tibet University, 64.2 percent of 53 Tibetan students saw nothing wrong with polygamy when it aids family harmony and its labor division and cooperation (Liu Rui, 1988: 275)." If young university students in the late 1980s believed in the advantages of polygamous marriages there must be a rationale for these marriage patterns to be continued under current economic and social conditions and they will, no doubt, last for a long time in Tibet.

Marriage registration was introduced into the TAR only after the land reform in 1959. "Except for government employees, workers and some urban residents, this regulation has not been enforced in many rural areas (Liu Rui, 1988: 268)." Table 8.3 shows that there were still 45 to 58 percent of urban household heads without official marriage registrations in 1988 and there were even more residents in rural areas without marriage registrations.

Regardless of rural or urban areas, there were more female heads with marriage registrations than male heads. In general, women and rural residents had less contact with governmental administration and the outside world, and they were less influenced by government encouragement to obtain a marriage registration.

Marriage registration is a legal status by which marriages are protected by laws and it creates the legal framework by which rights over household property can be claimed by couples and their descendants. The fact that a large proportion of urban and rural Tibetan residents are without marriage registrations is evidence that many Tibetans still maintain their traditional ways and their traditional views of social relations and marriage.

Decision-making Concerning Marriages in the TAR

A key issue in marriage studies is spouse selection. Whether the decision is made by the young men and women themselves or by their parents, or even by community leaders, may reflect the social norms of a society. In the early stages of human civilization men and women were quite free to be together. Accompanying the emergence of private property and the strengthened power of families and clans, parents and clan chiefs selected marriage partners for the most part. A marriage was not a simple affair between two young individuals but related to the interest of two families, two clans and even two communities. "Women are more likely to be controlled by kin or family in their choice of mates than are men (Goode, 1982: 61)." When individual freedom has been recognized in a society, young people became more independent in social and economic affairs resulting in their ability to select their own spouse. Moreover, those rights came to be protected by laws.

The studies of the 1950s paid some attention to the marriage decision patterns in ethnic minority areas. The survey in Chongye *dzong* (in Lhoka Prefecture) revealed that there were limitations on marriages with regard to social status and blood kinship: marriage was prohibited between descendants of the paternal and maternal sides within six generations.[5] Marriage between aristocratic and ordinary people, between those with acceptable occupations and "low class occupations (blacksmith, butcher, beggar, corpse carrier, etc.)" were also forbidden.

In Lhoka region, "the cases of parents making decisions for their children in spouse selection occurred more often among the rich, while young people had more freedom in their marriages (TSHSSEG, 1989a: 98)." A similar situation was found in field surveys in other areas.[6] In Tibet, before land reform, there were social and economic reasons for poor youth to have more freedom in their marriages. "Since *Du-jung* and *Qian-dou* had no *Tre-gang* lands or *Ma-gang*[7] lands, they were not bonded by land and duties, and therefore had more freedom in marriages (TSHSSEG, 1989c: 112)." Serfs belonging to different estates could not get married without the permission of their respective owners. If a female serf from one estate married a male serf from another, the owner of the male serf would give another serf to the owner of the female serf as compensation (CTRC, 1992: 161–162). "The children of the two serfs who belong to different owners will be owned by their

masters according to their gender, boys belong to the owner of the father serf, girls belong to the owner of the mother serf (CTRC, 1992: 125)."

Channels by which our respondents got to know each other before marriage are listed in Table 8.5. The majority in rural and urban areas, as well as throughout various periods of time, choose their own mates. These young people might have consulted their parents but they ultimately made the decision themselves. Urban residents of Lhasa had a lower percentage of marriages that were decided by parents (11.7 percent) compared with rural residents (18.8 percent). Urban youth have more opportunities to meet each other in their work places or through other social networks, and 81.5 percent got to know their intended spouses by themselves. In contrast, only 64.7 percent of rural respondents got to know their intended spouses by themselves. One point should be kept in mind. Since most Tibetans knew that freedom of marriage was encouraged by the government after the 1950s, their answers in 1988 might not reflect the real situation in the past

Professional matchmaking seems to have disappeared in Lhasa since the 1960s but has remained in the rural areas (5.8 percent). Because of low population density, smaller villages and large distances between villages, matchmakers, who travel more extensively than do ordinary farmers or herdsmen, continue to play a role in rural areas.

The nature of marriage decisions has experienced some changes in the past several decades. The percentage of marriages decided by parents has declined in rural areas from 26.5 percent in the 1960s to 20.6 percent in the 1970s and 12.3 percent in the 1980s. This category also declined in Lhasa, from 10.6 percent in the 1960s to 9.3 percent in the 1970s, but increased again to 14.8 percent in the 1980s. After the 1959 land reform, the government encouraged young people to select spouses themselves and considered selections made by parents a residual form of the feudal system. This resulted in more young people making marriage decisions in both rural and urban areas.

Even in the 1950s many young people had the right to spousal selection. They were free to date, and children outside marriage were not discriminated against in their communities. "Women carrying children before marriage generally brought these children to the groom after getting married and were not discriminated against by the groom's family. Sometimes, these children were raised by the uncle or the mother's parents, and become a member of mother's family (Chen Qingying, 1995: 424)." "Among 63 households of the Tangkar Tribe, 22 women had illegitimate children . . . among 69 women of the 19 *ta-wa* (monastery serf) households held by the Sogar Monastery, 20 women had illegitimate children (Li Zhichun, 1984: 116)." These reports may be indicative of the tolerant attitude of parents and the community toward lovers and sexual relations before marriage.

The Tibet University Survey (1988) also studied decision-making in marriages. Differing from our 1988 survey, this investigation interviewed only

Table 8.5. The Channels for Getting to Know Each Other before Wedding for Interviewed Tibetan Household Heads (1988)

Date of wedding	Lhasa						Counties					
	1*	2	3	4	5	Total	1	2	3	4	5	Total
–1930	16	1	1	1	-	19	3	1	-	1	-	5
1931–1940	28	4	1	1	-	34	10	5	1	1	-	17
1941–1950	64	14	2	1	-	81	29	2	8	-	1	40
1951–1960	100	12	6	1	-	119	84	18	10	7	1	120
1961–1970	88	11	5	-	-	104	98	39	11	5	-	153
1971–1980	70	8	8	-	-	86	63	22	12	10	-	107
1981+	39	8	7	-	-	54	36	7	8	5	1	57
Total households	405	58	30	4	0	497	323	94	50	29	3	499
Total (%)	81.5	11.7	6.0	0.8	0.0	100.0	64.7	18.8	10.0	5.8	0.6	100.0

* The channels: 1. By themselves; 2. Decided by parents; 3. Introduced by friends; 4. Introduced by matchmaker; 5. Others.

married women, not the heads of households of both genders. The study results make an interesting comparison. In urban areas, young people who made decisions on their own comprised 36.5 percent of the total, "parents selected, then agreed to by youth" made up 32.4 percent, "self-selected, then agreed to by parents" made up 31.1 percent; none of the urban marriages was completely decided by the parents. In rural areas "self-decided" comprised only 17.3 percent of the total, "parents selected, then agreed to by youth" and "self-selected, then agreed to by parents" comprised 16.2 percent and 11.0 percent respectively. Strikingly different from the urban areas, "parents decided" marriages in rural areas consisted of as many as 52.5 percent (Wang Daben, et al, 1993: 47). Therefore, there was a higher percentage of "parents decided" marriages in rural areas and a higher percentage of "self-decided" marriages in urban areas, confirming the results of our survey.

There may be many methods to classify marriages by decision-making concerning spousal selection.[8] The same type of decision-making, or the same opportunities for youth to get to know each other, for spousal selection might have different meanings in different societies. For example, professional matchmakers may play quite different roles in the cases where parents make the decisions as opposed to cases where people select their own spouses. In the first case, the matchmaker may have quite a definite role and function, while in the second case they could serve simply as someone who introduces prospective partners.

Comparison of Brides and Grooms by Education, Occupation and Family Background

There are many complicated issues related to marriages: inheritance of a social/hierarchic title, the inheritance of property, new social networks created by the marriage, which may bring benefits/advantages as well as obligations/risks, and even become more complicated if the marriages involve people of different races, ethnicities, religions and cultural customs. These concerns are important in the final selection of the spouse.

In order to understand the principles of spouse selection (scope of selection) and criteria (detailed requirement), an important measure is to compare the situation of both sides (bride and groom as well as their families) at the time of the wedding or, more accurately, the time when the decision to get married was made. Therefore, our questionnaire included questions about educational and occupational backgrounds of household heads as well as a comparison of the standard of living of both sides at the time of the wedding.

From Table 8.6 we can see that the percentages of marriages where the bride and groom were both illiterate was high in both rural and urban areas (61.4 percent and 47.2 percent respectively). This first reflects the generally low level of education in Tibet and also indicates the trend of selecting a partner of similar educational background. The second large group are those where the husband has attended primary school and the wife is illiterate; 16.6 percent in Lhasa and 22.7 percent in rural areas. The third group consists of couples who have both attended primary school; about 9.3 percent in Lhasa and 8.6 percent in rural areas. Similar situations were found in other regions in China so Tibet shares this pattern with the rest of China. There were only a few cases with a wide education gap between husband and wife — three women with college educations married to illiterate husbands in Lhasa (Table 8.6). There were also three husbands who were college graduates married to illiterate wives.

Table 8.6. Educational Background of Husband and Wife at the Time of Marriage

Husband	Wife													
	Lhasa							Counties						
	Illiterate	Prim. school	Junior middle	High school	Prof. high s.	Univ./college	Total	Illiterate	Prim. school	Junior middle	High school	Prof. high s.	Univ./college	Total
Illiterate	228	28	8	-	4	3	271	313	14	2	-	-	-	329
Primary school	80	54	3	2	2	-	141	116	44	2	-	-	-	162
Junior middle	19	12	7	1	1	-	40	10	3	5	-	-	-	18
High school	5	3	3	1	1	-	13	-	-	-	-	-	-	0
Prof. high sch.	2	2	-	4	-	-	8	-	-	1	-	-	-	1
Univ./College	3	1	2	-	2	2	10	-	-	-	-	-	-	0
Total	337	100	23	8	10	5	483	439	61	10	0	0	0	510

The occupational backgrounds of Tibetan couples at the time of their weddings in Lhasa and in rural areas are presented in Table 8.7 and Table 8.8. A common phenomenon is that most people married someone with the same occupation regardless of whether they lived in a rural or urban area. The numbers on the left of the diagonal line from top left to bottom right are generally larger than the numbers on the other side of the line. A total of 40 percent of total marriages in Lhasa and 89.2 percent of total marriages in the rural areas fit this pattern: husband and wife having the same occupation at the time they wed. Because there was a high level of homogeneity of occupational structure in rural areas (91.7 percent of males and 88.1 percent of females in those couples who were farmers), farmer-farmer couples comprised 89.2 percent of the total.

Table 8.7. Occupational Background of Tibetan Couples at Their Weddings in Old Urban Lhasa

Husband	**Wife**												
	Worker	Cadre	Profess-ional	Service labor	Un-employed	Peasant	Handi-crafts	Collect. worker	Soldier	Nun	Self-employed	Others	Total
Worker	**66**	3	3	9	18	17	10	8	-	-	-	1	135
Cadre	8	**17**	-	3	7	6	3	8	1	-	-	2	55
Professional	1	-	**2**	2	3	-	-	-	-	-	-	1	9
Service labor	4	1	-	**23**	7	22	3	1	-	-	2	1	44
Unemployed	8	1	1	-	**20**	11	3	3	1	1	2	3	44
Peasant	6	-	-	1	8	**23**	4	2	-	-	-	1	45
Handicrafts	3	2	1	4	16	4	**10**	5	-	-	1	3	49
Collect. worker	4	1	-	2	7	5	1	**25**	-	-	1	2	48
Soldier	4	-	-	4	1	2	-	3	**2**	-	-	2	18
Monk	3	-	-	2	5	1	-	-	-	-	-	-	11
Self-employed	1	-	-	-	2	2	-	2	-	-	**5**	-	12
Others	5	1	-	1	4	-	-	1	-	-	-	-	12
Total	113	26	7	51	98	63	34	58	4	1	11	16	482

There was a higher diversity in occupational structure among Lhasa residents. Some different occupations actually shared similar incomes and social status. For example, cadres, workers and professionals (all working in state-owned enterprises or institutions) were quite similar in income and social status. Marriages between these three occupations were quite common in Lhasa (Table 8.7).

There were 16 craftsmen who married unemployed women. Some of the craftsmen in Lhasa were from rural areas and without government jobs so they found it difficult to marry a female government employee and tended to marry daughters of Lhasa residents who had no particular jobs at the time. Among 18 men

Table 8.8. Occupational Background of Tibetan Couples at Their Weddings in Rural Counties

Husband	Wife								
	Worker	Cadre	Profess-ional	Peasant	Collect. worker	Nun	Self-employed	Others	Total
Worker	-	-	-	9	-	-	-	-	9
Cadre	-	4	-	11	-	-	-	-	15
Professional	-	1	-	1	-	-	-	-	2
Service labor	-	-	-	1	-	-	-	-	1
Peasant	10	2	2	473	-	-	2	1	490
Handicrafts	-	-	-	3	-	-	-	-	3
Collect. Worker	-	-	-	2	1	-	-	-	3
Soldier	-	-	-	2	-	-	-	-	2
Monk	-	-	-	1	-	2	-	-	3
Self-employed	-	-	-	1	-	-	-	-	1
Others	-	-	-	6	-	-	-	21	27
Total	10	7	2	510	1	2	2	22	556

serving in the military, only two married females in military service. Because there were many more men than women in the military, the majority of these men found their spouses among civilians.

Because of a high degree of homogeneity of occupations in rural areas, marriages between farmers and other occupations for both genders constituted the largest group next to farmer-farmer marriages, which comprised 85.1 percent of the total.

When comparisons were made between the standard of living of the bride's family and that of the groom's, the trend of marrying someone similar in this way was also evident. The cases in which the standard of living was quite similar for both families (the level of consumption directly reflects the level of income and number of properties) comprised 54.4 percent in rural areas, and 62.0 percent in the old urban areas of Lhasa (Table 8.9). Economic conditions (income and properties) of the family, educational achievement and occupation were the major indicators of people's family backgrounds and their social status. "All systems of spouse selection have the tendency to be 'marriage of the same kind,' meaning that people of similar class status marry each other (Goode, 1982: 75)." The tendency we found in the analyses of the above three variables is consistent with this general principle.

There is another characteristic of marriages in Tibet besides "tendency of similarity." A marriage pattern in which the groom's family was better off was more frequent than a situation in which the bride's family was better off. The difference between the two patterns was 4.8 percent in rural areas and only 0.8 percent in urban Lhasa. It may suggest that the first pattern (groom's family better off) is a growing

trend in the TAR as it is in other parts of China, and occurring more often in rural than urban areas. This difference reflects the increased economic independence of urban young women and their equal status to men, compared with rural women. The standard pattern for rural China is women marrying up; the current gender imbalance is certain to strengthen this pattern.

Table 8.9. Comparison of Living Standards between Bride's and Groom's Families at Wedding

Comparison	Lhasa		Counties	
	Household	%	Household	%
Groom's family more prosperous	105	19.4	135	25.2
Wife's family more prosperous	101	18.6	109	20.4
Both families similar	336	62.0	291	54.4
Total	542	100.0	535	100.0

Geographic Distances between Spouses before Marriage

Geographic distance between a bride's and groom's residence before marriage was also examined in our questionnaire. In general, accompanying the development of the market economy and urbanization, geographic mobility has increased. Since residential registrations and relevant migration restrictions have been practiced in China for several decades, marriage was one of the few legal prospects for migration and the opportunity officially to transfer household registration.[9] In some areas it was discovered that marriage had been the major legal reason for women migrating from poor to rich villages and from villages to towns (Ma Rong, 1989: 48–50). Our 1988 survey reported that 16.6 percent of in-migrants among interviewed Lhasa household heads and 14.3 percent of rural household heads claimed that their reason for migration was marriage.

Urban residents usually have more geographic mobility in marriage than their rural counterparts. This was confirmed by our 1988 survey. Marriages between men and women who lived in the same *xiang* (or street office in urban areas) comprised 74.7 percent of the total in rural areas and only 39.4 percent in the old urban areas of Lhasa (Table 8.10). Marriages that necessitated crossing county and prefectural borders comprised 26.2 percent and 13.8 percent of the total respectively in Lhasa, but only 4.9 percent and 1.0 percent in rural areas. Therefore it is clear that when it comes to the geographic scope in selecting spouses, three-fourths of peasants selected someone from their own *xiang*, one-fifth from a nearby *xiang* but within their county, and only 6.2 percent crossed county borders.

Table 8.10. Distance between Bride's and Groom's Residences at the Time of Marriage

Date of marriage	**Lhasa**						**Counties**					
	In *xiang*	In county	In prefec.	In TAR	Cross region	Total	In *xiang*	In county	In prefec.	In TAR	Cross region	Total
–1930	4	4	6	5	0	19	5	0	0	0	0	5
1931–40	13	7	10	3	1	34	16	1	1	1	0	19
1941–50	31	20	16	17	0	84	34	2	5	0	0	41
1951–60	44	26	30	17	4	121	99	69	8	2	0	178
1961–70	44	22	28	11	0	105	133	23	4	1	0	161
1971–80	42	12	25	9	1	89	96	11	6	0	1	114
1981–88	22	8	18	8	0	56	48	4	4	2	1	59
Total	200	99	133	70	6	508	431	110	28	6	2	577
Total %	39.4	19.5	26.2	13.8	1.2	100.0	74.7	19.1	4.9	1.0	0.3	100.0

"In xiang": the places of both bride's and groom's residences were situated within the same *xiang* (town);
"In county": the places of both residences were situated within the same county but crossed *xiang* boundary;
"In prefe.": the places of both residences were situated within the same prefecture but crossed county boundary;
"In TAR": the places of both residences were located within the TAR but crossed prefecture boundary;
"Cross R": the places of both residences were located within China but crossed provincial boundary.

Although Tibetan tradition emphasizes marriages "outside blood kinship," the sparse population distribution and limited transportation options increase the difficulties farmers face in selecting spouses from areas far from their homes.

The large volume of migration due to social changes during some historical periods also had some impact on spouse selection and marriage patterns. In the 1950s rural marriages crossing *xiang* borders recorded in our survey numbered 69 (38.8 percent of the total in that decade), much more than during other periods. It might reflect population migration due to the political situation and land reform in rural areas at the time. In contrast, there were no obvious changes in the marriage-distance patterns in the old urban area of Lhasa over time. Marriages that compelled the crossing of at least county borders comprised about 39.3 percent (1940s), 42.1 percent (1950s), 37.1 percent (1960s), 39.3 (1970s), and 46.4 percent (1980s), and stayed at roughly the same levels in all the decades surveyed.

Tibetan-Han Intermarriage

Tibetans made up 95.1 percent of the total population of the TAR in 2007, while Han made up 4.0 percent and other ethnic groups 0.9 percent. A large proportion of Han in the TAR who arrived after 1952 were cadres, professional, workers and their dependents.

Intermarriage is widely viewed as an important indicator for measuring ethnic assimilation. Intermarriages can take place on a large scale only under situations in which two groups communicate in the same language, have frequent social contact, accept each others' norms and value systems, generally be equal by law and in the distribution of power, reduce racial/ethnic prejudice and discrimination to against each other, and have generally good relations among ethnic groups (Gordon, 1964: 78). Therefore our 1988 survey paid special attention to intermarriage.

Historically, more Tibetan-Han intermarriages took place in the Tibetan-inhabited areas near the Han regions (Sichuan, Qinghai and Gansu) than in the present TAR. During the late Qing Dynasty, the government implemented agricultural development in these areas accompanied by a policy of "Gai-tu-gui-liu" (transforming traditional inherited chiefmen — *tusi* into appointed officials) in the local administration. Many Han farmers moved into these areas, and some of them married local Tibetans.

Li Anzhai compared the household size of intermarried families with other families in the Kantse area in the 1940s (today's Kantse Tibetan Autonomous Prefecture in Sichuan). "For Tibetan households, the average household size was 2.54 persons. The average size was 4.88 persons for Han-Tibetan intermarried households and 6.5 persons for Han households. It is clear that Tibetans have smaller families and Han have larger families, with intermarried ones in the middle. This comparison has some meaning in the context of cultural contact and changes (Li Anzhai, 1946: 49)." "Based on the statistical records of Liu Zanting in 1941, Tibetan-Han intermarried households numbered about 45,000 in the Kantse area (Xu Ming, 1989: 290)." These studies suggest that Tibetan-Han intermarriages were popular in the Kantse area at the time.

A British doctor who lived in Lhasa for four months in 1811 noted that "there was one officer and a small military camp of the Qing government in every town. There was a post set up by the Qing administration a certain distance along the post-road from Lhasa to other places. Many Qing soldiers married Tibetan women and had children (Taller, 1992: 451)." Other studies also indicated that because the Qing government "failed to replace garrison soldiers every three years as the regulations required, the soldiers intermarried with Tibetan women and produced families which ate up their scanty pay (Fletcher, 1978: 102)." It seems that intermarriages involving soldiers were also widespread in central Tibet at one time.

Apart from soldiers, there were 2,000 to 3,000 Han merchants, artisans and farmers living in Lhasa and other towns in Tibet during the late Qing Dynasty. It was quite possible that some of them intermarried. Though we cannot obtain detailed data, their numbers could have been significant. For example, when Huang Musong visited Lhasa in 1934 to offer condolences to the 13th Dalai Lama he held negotiations with the Tibetan *Kashag* government and one of his requests was that "all half-Chinese residents in Tibet should be under the sole jurisdiction of the

Chinese officer at Lhasa." But this request was rejected by the *Kashag* (Goldstein, 1989: 237, 240). In addition, two serous disagreements between the Mission of the Kuomintang Government in Lhasa and the *Kashag* in August and October of 1942 were caused by differences over who had jurisdiction over the children of Tibetan-Han intermarriages (Goldstein, 1989: 383–384). So we know that Tibetan-Han intermarriages did take place in Tibet during the Qing Dynasty and after the 1911 revolution.

Although there are some historical descriptions, data about intermarriage has been very limited since 1952. The 1990 census provided data on "united households of Han and ethnic minorities" by county in the TAR. "United households" is the English term used in Chinese translation, referring to mixed marriage. Since ethnic groups apart from Tibetan and Han comprised only 0.9 percent of the total population, we can assume that united households of Han and ethnic minorities were Tibetan-Han households in most cases.

In 1990 there were 2,639 united households of Han and ethnic minorities with 10,951 household members in the TAR. About 37.7 percent of them lived in the Urban District of Lhasa, another 34.6 percent lived in six towns situated in prefectural capitals, and 7.5 percent lived in counties of Chamdo Prefecture (excluding Chamdo County). These three areas held 80 percent of the total number of united households (COT, 1992a: 188–189). The number of ethnic-mixed households was reported to be 7,343 in the 2000 census, 2.78 times the number in 1990. Of them, 28 percent lived in urban Lhasa. That means that intermarriages in the TAR increased from 1990 to 2000 and spread from main cities.

The intermarriage rate is an important index for measuring ethnic relations. There were 383,839 minority households (Tibetan households, households of other ethnic minorities, and intermarried households between ethnic minorities were not separated in this category), 15,963 Han households, and 2,639 united Han-minority households in the TAR in 1990. If we assume that all minority households were Tibetan households and there was only one married couple in each household,[10] the intermarried rate was 16.5 percent among Han and only 0.7 percent among Tibetans (minorities). The low intermarriage rate of Tibetans is largely due to the paucity of Han and other ethnic minorities in the TAR. The situation in the TAR can be compared with the strikingly different situation in Inner Mongolia, where about 15 percent of married Mongolians were in intermarried households in 1982 with Mongolians males and female equally represented among total intermarriages (Song Naigong, 1987: 372). The Han made up about 85 percent and 79 percent of the total population in Inner Mongolia in 1982 and 2000 respectively, increasing the possibility for Han to come into contact Mongolians in their daily lives.

Among interviewed households in the old urban areas of Lhasa during our 1988 survey, there were 24 cases of Tibetan-Han intermarriage (4.3 percent of the total): 14 of them involved a Tibetan husband and a Han wife, and 10 involved

Han husbands and Tibetan wives. Meanwhile, there were only 10 intermarriages in interviewed rural households: three involved Tibetan husbands and Han wives and seven involved Han husbands with Tibetan wives.

From information obtained from our 1988 survey it seems that there were more Tibetan/male- Han/female intermarriages in urban Lhasa with more Han/ male- Tibetan/female intermarriages in rural areas. The first case of intermarriage among interviewed households occurred in the 1920s, the number of intermarriages increased in the 1940s (five cases), then continually increased in the following decades (six cases in the 1950s, 10 cases in the 1960s, and seven cases in the 1970s) but sharply declined in the 1980s (two cases).

Table 8.11. Time Distribution of Interviewed Tibetan-Han Intermarriage (1988 Survey)

Year of marriage	Lhasa					Rural County*		Total
	Tibetan-Han		Han-Tibetan			T-H	H-T	
	Married	Divorced	Married	Divorced	Widowed	Married	Married	
–1920	1	0	0	0	0	0	0	1
1921–1930	0	0	0	0	1	0	0	1
1931–1940	0	0	0	0	2	0	0	2
1941–1950	1	1	1	0	0	0	2	5
1951–1960	3	0	1	0	0	0	2	6
1961–1970	2	1	1	1	0	3	2	10
1971–1980	4	0	1	1	0	0	1	7
1980–1988	1	0	1	0	0	0	0	2
Total	12	2	5	2	3	3	7	34

* Intermarried couples in counties have no incidence of divorce or widowhood.

Among the intermarried couples, a large proportion were both illiterate (41.7 percent of the total in urban Lhasa and 60 percent in rural areas) (Table 8.12). In the second largest group both partners had primary school education (29.2 percent in urban Lhasa). In the third group the husband had a primary school education and the wife was illiterate (six cases). A general description would be that the husbands had a similar educational background or were slightly higher educated than the wives in intermarriages. One special case found in Lhasa was quite surprising: an illiterate Tibetan male had married a Han wife with a college education. The husband was a Tibetan cadre who used to be a serf. He participated in some short-term training programs but those were not counted in his records as official schooling.

A comparison between families of intermarried couples shows similar patterns as the Tibetan marriages discussed above. Intermarriages between those of similar economic background (20 cases) comprised 58.8 percent of the total 34 cases. Among the remaining 14 cases, in eight the groom's family was better off than the bride's and in six the situation was the reverse.

Table 8.12. Comparison of Education and Wealth for Intermarried Couples at Their Weddings

Educational background of intermarried couple at wedding (Husband wife)	Lhasa		Counties		Total
	T-H	H-T	T-H	H-T	
Illiterate — illiterate	7	3	2	4	16
Primary school — illiterate	1	3	1	1	6
Primary school — primary school	4	3	0	0	7
Junior middle school— primary school	1	0	0	1	2
Junior middle school — junior middle school	0	0	0	1	1
Illiterate — college	1	0	0	0	1
Vocational school — primary school	0	1	0	0	1
Total	14	10	3	7	34
Comparison of wealth of both families					
Groom's family was wealthier than bride's	3	3	1	1	8
Bride's family was wealthier than groom's	2	3	1	0	6
Both families were quite similar	9	4	1	6	20
Total	14	10	3	7	34

"T-H": Tibetan husband and Han wife, "H-T": Han husband and Tibetan wife;

Table 8.13. Comparison of Occupations for Intermarried Couples at Their Weddings

Occupations of intermarried couple at wedding (Husband-wife)	Lhasa		Counties	
	T-H	H-T	T-H	H-T
State-owned ent. worker — state-owned ent. worker *	5	2	0	0
Professional — state-owned ent. worker	1	0	0	0
Cadre — state-owned ent. worker	0	1	0	0
Service labor — service labor	1	1	0	0
Collective ent. employee — state-owned ent. worker	1	0	0	0
Craftsman — craftswomen	0	1	0	0
Unemployed — unemployed	0	1	0	0
Cadre — collective ent. Employee	0	1	0	0
Cadre — cadre	0	1	0	0
Peasant — peasant	0	0	3	7
Service labor — state-owned ent. worker	1	0	0	0
State-owned ent. worker — collective ent. employee	0	1	0	0
State-owned ent. worker — unemployed	1	0	0	0
State-owned ent. worker — craftswomen	1	0	0	0
Peasant — craftswomen	1	0	0	0
Other — other	1	0	0	0
Service labor — other	1	0	0	0
Craftsman — unemployed	0	1	0	0
Total	14	10	3	7

* State-owned enterprise worker.
"T-H": Tibetan husband and Han wife, "H-T": Han husband and Tibetan wife;

Of 24 intermarried couples interviewed in urban Lhasa, seven were both workers at the time of their wedding and four couples had the same occupation (service worker, cadre or handicrafts). The rest were in other occupations without obvious patterns (Table 8.13). All 10 cases of intermarriages in the rural areas were peasant couples.

First Marriages for Household Heads with Multiple Marriages

Among all interviewed household heads, 115 were married more than once. Data for their first marriages may provide some additional information to our study. Most of their first marriages were monogamous (78.3 percent in urban Lhasa and 71.7 percent in rural areas) (Table 8.14). But the percentage of monogamy was lower than in their present marriages (99.5 percent in urban Lhasa and 91.3 percent in rural areas in 1988). That might indicate the general trend for increasing monogamy since the 1950s, perhaps as a result of government propaganda efforts that encourage monogamy. Other studies revealed a similar trend in pastoral areas. According to statistics of Shuang-hu Administrative Office in northern TAR, "Among all new households, there were 37 marriages (112 individuals) that were either polyandrous or polygynous during 1978–1980, declining to only five such marriages (15 individuals) during 1980–1983." "There were three marriages that were polyandrous or polygynous in Biqu *xiang* of Amdo County, the latest one occurred 20 years ago (Gelek, et al, 1993: 201)." It seems that monogamous marriages have become the dominant model among both rural and urban Tibetans and their numbers are increasing.

But this general trend does not necessarily exclude the possibility that there might be some other types of marriages in certain areas and that these might increase in spite of the larger trends. "The reports of the Women's League of the TAR revealed that among 50 newly married couples in Parga *xiang* of Dam Shung county during 1982–1984, 10 percent belonged to either polyandrous or polygynous relationships (Zhang Tianlu, 1989: 26)." While these types of marriages had been common in both urban and rural areas in Tibet for centuries, they were discouraged by the government after the 1959 land reform and their numbers declined in the 1960s and 1970s, as did the number of monks, thereby putting more eligible men into the pool of prospective husbands. The decline was due to the political and cultural environment during that time. Since the new reform policy came into practice, the restrictions have been loosened in all aspects of society. The number of monks increased from 800 in 1970 to 41,800 in 1994 (Lin Junhua, 1995: 17), reducing the number of eligible males. Meanwhile the household responsibility system in rural areas promoted the need for labor re-organization, allowing for the re-emergence of traditional customs; the combination may have resulted in an increase in polyandry or polygyny in some areas.

There were seven Tibetan-Han intermarriages among the first marriages; 6.1 percent of the total of first marriages, a higher percentage than that of present marriages (3.1 percent). The difference may reflect the decline of intermarriage in recent decades.

The 1988 survey asked the divorced respondents for the reason they ended their first marriages. Widowhood was the most common reason (50–52 percent) (Table 8.14). Divorce was the second most common reason (38–46 percent). These numbers are similar to the census data in Table 8.2. The percentage of widowhood was three to four times the rate of divorce in Table 8.2 for our 1988 survey. This was due mainly to the average higher age of urban respondents. For those who married more than once, the age they ended their first marriages should be lower and the reasons for ending those first marriages therefore should be closer to the general patterns recorded by the census.

Table 8.14. The First Marriage of Multi-married Tibetan Household Heads

	Lhasa		**Counties**	
Type of the first marriage	# of marriages	%	# of marriages	%
Monogamy	54	78.3	33	71.7
Polygyny	3	4.3	10	21.7
Polyandry	1	1.4	1	2.2
Unknown	11	15.9	2	4.4
Total	69	100.0	46	100.0
Reason for ending of first marriage	**Lhasa**		**Counties**	
Divorce	26	37.7	21	45.7
Widowed	36	50.7	24	52.2
Unknown	8	11.6	1	2.2
Total	69	100.0	46	100.0

Divorce in the TAR

"The four modes of voluntary departures from the family — separation, divorce, annulment, and desertion — are given different legal definitions in different countries, but they show much similarity of behavior (Goode, 1982: 150)." In nations with more developed legal systems, the legal statuses of each manner of separation are clearer and the legal procedures are more complicated.

Because there had been no formal marriage registrations in Tibet, divorce was relatively simple in most cases. "There were no procedures required for divorce, and also no need for witnesses or written documents (Lu Liandi, 1986: 202)." Easy procedures and the lack of discrimination against divorced women would

have increased the possibility of divorce when married people faced difficulties. In general, divorce for the poor and for nomads was easier and simpler than for the rich and the aristocrats.

Among Tibetan tribes in the Golok areas (Qinghai), "divorce was considered quite normal and there were no written legal procedures. But divorces required the agreement of tribal chiefs . . . A certain amount of money and items should be submitted to the chief before the divorce. The chief would try to mediate the problems between the husband and wife, and if he failed then the divorce became final. Upon divorce, all household properties would be divided equally among all adult members of the household, and children get half an adult's share (Xing Haining, 1994: 128)." In some areas, "even an unborn child could get half of an adult's share of the household properties (Chen Qingying, 1995: 437)." In the Golok areas, "if the man and the woman belong to different tribes, their marriage must be sanctioned by their parents as well as the chiefs of both tribes (Xing Haining, 1994: 125)." It is clear that tribal chiefs enjoyed a high status when it came to questions of marriage and divorce. Except for the Golok areas, "there was no need to go through tribal chiefs for divorces in most areas. The chiefs would be invited, with offers of a gift, which was usually a sheep or a cow, only when arguments occurred (Chen Qingying, 1995: 438)."

There were various kinds of arrangements when it came to property distribution and compensation upon divorce in the different regions of Tibet. In the Tibetan area of Songpan (western Sichuan), when a woman requested a divorce but her husband disagreed and she left the household, they both were required to pay a fine to the head of their tribe. "The fine would be four cows in the Ruoergai (Zogye) area. Daughters would live with their mothers while boys would live with their fathers. The only son would go to the monastery and become a monk." In some other areas in western Sichuan, the person who asked for a divorce had to pay the spouse "money to compensate for shame." This was usually 15 to16 *liang* of silver (1 *liang* = 31.25 grams) in Xiaojin (Tsenlha) area, and 30 to 100 *liang* of silver in the Choktse area. These heavy obligations made people hesitate to divorce (Chen Qingying, 1995: 438–439).

Some studies talked about a "lip-to-lip marriage" among poor Tibetans. Because they had no property to offer as betrothal gifts or dowries, couples come to live together without any formal ceremony. In northern Tibet, "there were 68 cases of this kind of marriage in the Wapa tribe, 64 of them were poor serf-herders (Zhang Quanwu, 1986: 98)." There were also no procedures when these marriages disintegrated and divorce rates were generally high. "There were 486 residents in marriages in 212 households among the Wapa Tribe of Nagchu *dzong* before the 'democratic reform,' 57 of them divorced at least once, some even divorced twice or three times. There was no formal procedure for divorce, sometimes one of the couple simply left, sometimes they negotiated then separated if mediation failed (TSHSSEG, 1989a: 227)."

An investigation in the Chongye *dzong* of the Lhoka area reported on the marriage rituals of the *tre-ba*. "The marriage rituals of aristocratic families were more complicated than that of *tre-ba*, and the marriages of poor *tre-ba* and serfs were much simpler. The marriages of the '*Nangsan*' were so simple as to do without any rituals. If both sides agreed to marry they reported this intent to their owners for permission, then moved in together and formed a family. They might get divorced if they could not get along but cases of divorce in reality were limited. Boys would live with their father and girls with their mother. In cases of divorce, family properties would be divided into two uneven portions with the initiator of the divorce getting a smaller share (CTRC, 1992: 164)."[11]

Based on this information, the first characteristic of Tibetan marriages among the poor is the lack of marriage ceremonies. The second characteristic is the concomitant lack of formalities for divorce and the resulting low stability of marriages. But we must emphasize that marriages among the aristocrats were very different from the poor serfs and herdsmen, though there were far fewer aristocrats. They had very strong restrictions concerning spousal class background and very complicated procedures and rituals for weddings.[12] Their marriages also were much more stable because they were closely related to the continuity of families and estates as well as other properties (Nakane, 1992).

Recent studies suggest a rising trend of divorce rates in both agricultural and pastoral areas. The number of divorces increased from two in 1967 to 20 in 1983, then to 53 in 1985 in Shigatse County (Zhang Quanwu, 1986: 117). Divorce rates also increased in urban areas in the 1980s. According to information provided by the Bureau of Civil Affairs of the Lhasa Urban District in 1988, the number of residents who applied for divorce increased two-fold in 1987 compared with the 1981 rate.

Table 8.15. Marriage Registration in Lhasa Urban District (1981–1987)

Year	Total population	First marriage		Divorce					Resume marriage	Remarry
		Number*	Marr.rate**	Requested	Mediated	To court	Divorced	Div. rate***		
1987	107277	2322	10.8	178	60	10	108	5.0	6	22
1982	105897	2234	10.5	186	40	22	124	6.0	6	24
1983	104794	2326	11.1	228	68	18	142	7.0	20	146
1984	104269	1660	8.0	270	110	34	126	6.2	14	74
1985	107712	1832	8.5	158	32	12	114	5.6	14	150
1986	107725	2220	10.3	358	30	36	192	9.3	16	102
1987	117679	2220	9.4	340	100	32	208	10.0	20	26

* "Number of first marriage": number of persons who get married for the first time;
** "Marriage rate": number of marriages (couples) per 1000 population;
*** "Divorce rate": number of divorces (couples) per 1000 married couples.

The divorce rate in urban Lhasa increased from five percent to 10 percent during the period; those transferred to local courts were not included (Table 8.15). Therefore, the growth of divorce in the 1980s is the third characteristic of Tibetan marriages. Table 8.15 also shows that the number of those remarrying in 1987 was obviously lower than that in 1986 (from 53 percent of divorce cases in 1986 to 13 percent of divorces in 1987). This may reflect shifting opinions about marriage.

During our interviews in Lhasa in 1988, we visited the Court of the Lhasa Urban District for information about the ethnic make up in divorce and criminal cases. The ethnic composition of divorce cases taken by that court is presented in Table 8.16. Because we did not find the files for 1986, a comparison had to be carried out between other available years. We can see that divorces of intermarried couples have been increasing. The court accepted 208 divorce cases from May 1984 to December 1985; 12 of them were intermarried couples. The court accepted 206 divorce cases from January 1987 to September 1988, 24 of whom were intermarried couples. The percentage of intermarried couples who divorced seems to have doubled in a short time. Because a large proportion of the Han population lives in Lhasa, Tibetan-Han intermarriages took place more often in Lhasa so the statistics of Lhasa Urban District are probably a good measure of intermarriages and divorces in Tibet.

Table 8.16. Divorce Cases in Lhasa Urban District Court

Receiving period	Total divorce case	T-T*	T-H	H-T	H-H	Others
May 1984–Dec. 1984	95	37	3	1	51	3
Jan. 1985–Dec. 1985	113	51	3	5	53	1
Jan. 1987–Sept. 1988	206	88	10	14	90	4

* "T-T" means Tibetan husband and Tibetan wife, "T-H" means Tibetan husband and Han wife; "H-T" means Han husband and Tibetan wife; "H-H" means both husband and wife were Han.

As to the reasons for divorces among Tibetan peasants before the 1959 "democratic reform," some studies have suggested that they were: an emotional distance emerging between husbands and wives after the wedding; an unstable income causing quarrels; and individuals tiring of their spouses and having adulterous relationships (TSHSSEG, 1989a: 227). Those are all fairly common reasons for divorce. Other studies have discussed factors affecting rising divorce rates in rural areas: no registration for marriages in the past; some youths rebelling against marriages arranged by their parents by applying for divorce after the fact; revival of a class preference among some people, resulting in a crisis in marriages where partners were not well matched; intervention of religious influences (negative assessment of marriages by monks); getting rich and becoming disenchanted with

their spouse; intervention by a third party; and misunderstanding of "free love" and "sexual liberation (Zhang Quanwu, 1986: 120)." These factors included both revived traditional views (religious intervention, parents' decision in marriage, matching of social status) and some modern ideas reflecting western lifestyles ("free love"), indicating that Tibetan society has been experiencing a rapid transition in which all kinds of culture and social norms interact together.

Conclusion

From this discussion and, especially, the analyses of the 1988 survey data, the basic characteristics of, and changes in, marriages among urban and rural Tibetan residents can be generalized as follows:

1. The types of marriage in Tibet are diverse. Apart from polyandry, which researchers have been most interested in, there is polygamy, two husbands and two wives, *Sumo* and other patterns. There are also several composite patterns of polyandry.
2. There are great regional variations in marriage patterns in Tibet, and polyandry is more popular in pastoral areas than agricultural areas. The regional differences in marriage patterns reflect the difference in natural resources, types of economic activities, and social and economic organizations in the different areas.
3. The 1988 survey suggested that marriage stability was lower among Lhasa residents than among rural residents. This was due largely to higher geographic mobility and unstable occupation and income circumstances for some urban residents.
4. Marriage registration had not been commonly practiced in the TAR until the late 1980s; more than 50 percent of interviewed married respondents in 1988 did not register their marriages. It is also worth noting that there was a trend toward registration in the 1990s.
5. Marriages decided by parents have declined since the 1950s. In general the percentage of self-decided marriages is higher in urban areas than in rural ones. A noteworthy phenomenon is the increase of parents deciding marriages in Lhasa in recent years.
6. There is a clear trend for people to choose a spouse with a similar background in education, occupation and family wealth in both urban and rural areas. In other words, the majority of Tibetans married someone with the same, or similar, educational achievement, occupation and family background.
7. The geographic distance between a bride's residence and a groom's residence before marriage was close in rural areas. Three-fourths of the marriages took place within the borders of a single *xiang*. In contrast 41 percent of urban Lhasa

residents married spouses from outside Lhasa. This reflects the difference between urban and rural residents in terms of their geographic mobility.

8. The 1990 census suggested that 16.5 percent of married Han residents in the TAR were married to ethnic minorities (mostly Tibetans). About 37.7 percent of these intermarried couples lived in Lhasa, and another 34.6 percent lived in the capital towns of six prefectures. This pattern parallels the general distribution pattern of the Han population. Among married Tibetans, only 0.7 percent married Han. This was due mainly to the small size of the Han population in the TAR. Tibetan-Han intermarriages seemed to have taken place most frequently in the 1960s and 1970s among Han cadres — military officers and native Tibetan women.
9. There was a rising trend of divorce in Lhasa in the 1980s while the remarriage rate declined. This phenomenon reflected changes in Tibetan marriages as more people began to live together without formally marrying.

Tibet has unique geographic characteristics and unusual natural-resource distribution patterns. Because of its natural conditions and relative isolation from the outside world, atypical marriage patterns emerged. These marriages cannot be classified simply by using the categories for other societies. Even similar formats might have quite different cultural content. The rapid social changes in the past several decades in Tibet must have had some impact on these traditional marriage patterns. The great regional variations and changes over time make Tibetan marriage practices a colorful field for academic research. But the studies in this field have been limited due to the lack of historical records and field surveys. The 1988 sampling survey we carried out provided some basic data for quantitative analysis. Based on this analysis, as well as other research literature, this chapter discussed several issues with regard to Tibetan marriages. Because of the limited sample size and geographic coverage, the analyses here are still at a very preliminary stage. We sincerely hope that the discussions in this chapter will provide some useful insights to other researchers in future studies in this field.

9

Educational Development in the Tibet Autonomous Region

Development of all human societies has been closely related to the development of knowledge, including what we nowadays classify as the humanities, social sciences, sciences and technology. Knowledge is conveyed to the populace and passed on to future generations through various forms of education. Accordingly, education is a key indicator of the social development of any society. But education is also a product of social, economic and cultural development. Several new industrialized countries and regions in East Asia have, since the 1960s, developed very rapidly in such areas as their economies, trade and management, and one of the most common explanations for this development has been the availability of basic education for the entire society. Modern education, it can be argued, is the key that opens the door to modernization.

The development of a society is actually the development of the caliber and capacity of its people. An analysis of the historical development of modern education in the TAR would help us to understand better not only the social, economic and cultural changes in Tibet in the past six decades but also the transition of Tibetan society from its traditional, and largely isolated model, to a new stage of involvement in the PRC's national education system. In general terms, "education" may include all channels of knowledge and social norm teachings in all forms. Such activities exist among family, clan and tribe members as well as in communications among people. In this chapter, we will only focus on systematic teachings in formal institutions such as religious education in monasteries and civic education in modern schools.

This chapter is divided into three parts. The first will review education in Tibet before 1952 based on relevant literature. The second part will examine the development of the school system in the TAR since the 1950s, based on census and statistical data and information obtained from our field research. The third part will discuss several key issues for future educational development in the TAR. Because of the paucity of literature and statistical data for the other Tibetan-inhabited areas outside the TAR, the main focus of this chapter will be on education in the TAR.

Education in the Tibetan Regions in History

During the late Qing Dynasty there were several categories of educational institutions and teaching modes in China: (a) *Si-shu*, traditional Chinese private schools sponsored by villages or clans (*Gong xue* or *Zu xue*);[1] (b) modern schools established after the 1911 revolution that were influenced by and in many ways similar to those in the West, (c) religious schools run by Muslim mosques, Buddhist monasteries and Taoist temples; and (d) tutorship, where rich families hired a teacher for their children to study, mainly the Confucian classics, at home. The main feature of Qing education was one of diversity in which various systems coexisted. It might provide a reference for examining education in Tibetan areas.

There are six books in Chinese and one book in English with detailed information about the history of and current situation pertaining to education in Tibet. Because westerners may not be able to read the Chinese books, which provide detailed information, a brief introduction of their content might be useful to understand how education was carried out in Tibet in the past.

The first was a report submitted to the central government by Wu Zhongxin, Chief of the Mongolian and Tibetan Affairs Commission of the Kuomintang government, based on his findings while visiting Tibet for the enthronement ceremony of the 14th Dalai Lama in Lhasa in 1939. This report was published in Taiwan in 1953 as *Tibet Summary*. The second book, edited by Tanzen and Zhang Xiangming, *Tibet in Today's China*, was published in 1991. One section in chapter 21, which focuses on education, provides an introduction to the educational systems in Tibet before 1951.

The third book, *Education in Tibet* (1991), was written by Durji Tseden. This volume provides detailed information about the educational systems in Tibet from the Tubo Kingdom period (A.D. 644–842) to the Mongolian Yuan, Ming and Qing dynasties as well as the period between 1911 and 1949. The description of monastic education is very detailed. Since Durji Tseden participated in re-establishing the Lhasa Primary School in August of 1952 and development of modern school systems in the TAR in the years that followed, these historical records are not only valuable but also very helpful in understanding the development of education in the TAR in the 1950s and 1960s. The author also addresses a number of critical issues such as bilingual teaching and Tibetan schools in Han regions with reference to the situation in the early 1990s.

The fourth book, *Studies of Education in Tibet* (1989), edited by Geng Jinsheng and Wang Xihong, is a collection of papers that approach Tibetan education from different perspectives. The papers in this book also discuss monastic education, *Si-shu* and official schools in Tibet (Gu Xiaorong and Gong Sulan, 1989: 220–223). The fifth book, *A Brief History of Tibetan Education in Modern and Current Times,* (1990) edited by Zhu Jielin, is a systematic analysis of

educational history. The book, which discusses Tibetan education during the late Qing (1840–1919) and the Republic (1919–1949), covers most Tibetan-inhabited areas outside the TAR today.

The sixth book is Zhou Wei's *Tibetan Language and Society* (2003). This book provides a detailed review of the process of language policy-making in Tibet. The author conducted field surveys in the TAR regarding language-use patterns of Lhasa residents, farmers, school students and government employees. The size of his samples is relatively small (about 138 urban households, around 110 students, 72 employees and 51 rural households) but the questionnaires included a lot of detailed information about language capacity and attitudes towards language policies and bilingual education. Another book, *Tibetan Language Work in the TAR* (2004), edited by Zhou Wei and Kelzang Gyaltsen, can be seen as an appendix to Zhou Wei's first book. It is a collection of all documents regarding Tibetan language policies issued by the TAR government, important speeches of TAR leaders and research reports on language by government institutions since 1987.

Catriona Bass's excellent *Education in Tibet: Policy and Practice since 1950* (1998, Zed Books), as the author says in the preface, "is the first full-length account of education in the TAR published outside China." It offers a thorough introduction to language policy dynamics and school practices since 1950. Her analysis was based on not only official statistical data and documents but personal in-depth interviews as well. She applied a framework of "quality vs. quantity preference" in interpreting the policy adjustment, which, it could be argued, fits into the reality of the TAR and is helpful in analyzing the logic behind policy dynamics. She points out that the importance of developing education alongside the economy was endorsed by the TAR governments as well as throughout China in the 1990s (Bass, 1998: 22). This is a key factor behind the preference for "quality" education. There is other literature about the development of schools in Tibetan areas outside the TAR since the 1930s (Upton, 1999).

The education system in Tibet before 1952

Education in Tibet before 1952 was "basically at the stage of monastic training with aristocrats having priority as students (Liu Rui, 1988: 315)." Since the rise to power of the *Gelugpa* sect of Tibetan Buddhism in the 15th century it has had absolute authority over not only religious affairs, government administration, legal jurisdiction and the economy but education as well, comparable to the authority of Christian churches in the Middle Ages in Europe.

For several centuries monasteries have played the most important role in education in Tibet. Monks were supported materially by the government and the populace, and education was more readily available to them than to most Tibetans.

"Ordinary Tibetan people had no opportunities to study, except in cases that they became monks; then they were taught to read and write religious scriptures in monasteries (Wu Zhongxin, 1953: 90)." The reality was that while monasteries could provide the best opportunities for education for ordinary Tibetans, only a few monks were taught to read and write; most learned to memorize religious scripture. A very small number of children of aristocratic families attended private schools, but the only way for most ordinary Tibetans to gain literacy was to become monks.

Traditional Tibetan culture, from the basic skills of reading and writing Tibetan to philosophy, astronomy, history, medicine, arts and literature, was spread and passed to the next generation through monastic education provided to the young monks. The education in *Si-shu* schools was just learning Buddhist scriptures and some Tibetan grammar.

The seventh chapter of Wu Zongxin's book provides excellent descriptions of the education system in Tibet at the time and its contents, translated into English, are summarized below.

Primary education

1. Monastic education: selected young monks were called "apprentices" and learned spelling and grammar from senior monks for three to five years. Then they began the study of Buddhist scriptures for three to four years. When they passed the exams at the end of this stage, they were called "lama." During the apprenticeship they were required to undertake physical work around the monastery. When they became lamas they could spend their days mainly praying and reading scriptures.
2. Aristocratic education: Tibetan aristocrats followed one of two educational paths depending on their status as either a member of the clergy or the laity. The *Zilaza* (*Tsedrung*) school was situated in the Potala Palace and usually had 50 to 60 students at any one time. The courses included Tibetan language, mathematics, medicine and divination. The students were mainly relatives of monk officials and monks from aristocratic families. They were selected by the three major *Gelugpa* monasteries around Lhasa. They were called *Zilaza* after graduation and were considered candidates to become monk officials of the *Kashag* government.

   The Calculation School (*Zi kang* or *Tsi gang*) was situated in the Jokhang Temple, where some 30 to 40 students from lay aristocratic families prepared to become lay officials of the government. The curriculum emphasized Tibetan language and mathematics.
3. Ordinary education. There were some *Si-shu* in Lhasa. Teachers were intellectuals who had sufficient Tibetan language skills and offered language courses. Children from both aristocratic and ordinary families attended *Si-*

shu to obtain the most basic education. Many children of aristocratic families graduated from these kinds of schools and then entered the Calculation School. There were three famous *Si-shu* in Lhasa with each having 70 to 80 students.

Higher education and government education

This refers to the education monks received after becoming lamas. All lamas were expected to study the scriptures of the *Mahayana* (sutras) for about 20 years, then apply to take the exams that led to the *Geshe* degree. After that they might continue their studies of the *Vajranana* (mantras, esoteric Buddhism), which could take another 10 years. The highest degree was the *Ganden Tripa,* the summit of a Tibetan Buddhist academic career. Most lamas stopped at the *Geshe* degree.

The *Kashag* government sent four students to London in 1923 to study mining, machinery, telegraphy and military science. Others were sent to schools in India and Nepal. Upon returning these students discovered that their newly acquired skills were not welcome and the practice of sending students abroad abated.[2]

There was only one school (First Primary School of Lhasa City) established by the central government. The students at this school were mainly the children of Han residents and some Tibetan children from ordinary families. No students from Tibetan aristocratic families attended due to religious and class-status factors. (Wu Zhongxin, 1953: 90–91)

Tanzen and Zhang Xiangming's book listed the schools in Tibet as being: (1) schools managed by the *Kashag* government to train monk and lay officials, (2) a professional Tibetan school of medicine, (3) modern-style schools established by the Qing government from 1904 to 1907, (4) the First Primary School of Lhasa City administered by the Kuomintang government from 1938 to 1949, (5) English-style schools established by the *Kashag* government, which hired British and Indian teachers,[3] and (6) *Si-shu* education that was private educational programs organized and supported by the rich or aristocratic families (Tanzen and Zhang Xiangming, 1991b: 300–302).

Monastic education was described by Gu and Gong as "a very complete educational system with a carefully designed system, framework and methods from configurations to content."[4] This educational system fitted perfectly into the framework of the Tibetan theocracy and served it well. "Buddhist monastic education left no space for normal school education. Monasteries were schools, monks were teachers, and Buddhist scriptures were used as textbooks." The other schools that trained monks and lay officials "were not the right places to learn systematic knowledge but were, in reality, small-sized training programs . . . *Si-shu* were simply organized without desks, chairs and textbooks. *Si-shu* offered only primary classes for the learning of spelling and reading." The students, who attended the First Primary School of Lhasa that was established by the Kuomintang government were

mainly Han and Hui children; there were very few Tibetan children.[5] Therefore, this school had only a limited impact on Tibetans (Yang Shengying, 1989: 146–151).

In Zhu Jielin's book there is a discussion about the detailed plans of the Mongolian and Tibetan Affairs Commission of the Kuomintang government to implement educational programs in various Tibetan areas. The First Primary School of Lhasa was a key component of these plans. The school was established in 1937 by the Bureau of Mongolian and Tibetan Education under the Ministry of Education. It had six classes, 187 students and 12 teachers in 1947 and was forced to close in 1949.

According to this book, there were about 20 private schools in Tibet in 1937 with about 400 students. Based on statistics from the Kuomintang government, there were about 1,050,000 Tibetans in 1947 with 157,500 of them of school age (Zhu Jielin, 1990: 196). Since the Tibetan areas in Qinghai, Gansu, Sichuan, and Yunnan were under the direct administration of the Kuomintang government, the modern education system (primary, middle, normal and professional high school) in these areas developed faster than those in Tibet. Another book, *The Theoretical Study of Education Reform and Development in Tibet, China,* published in 1995, also provided a general review of the historical development of modern education in Tibet but this study is concerned mostly with the issue of human resources planning (Wu Degang, 1995).

During the life of the 13th Dalai Lama (1876–1933), the *Gelugpa* sect waned in many respects. "Discipline and the regulation of monasteries weakened, corruption became prevalent among senior monks . . . there was corruption in the selection of monk officials and the selection of the monks to study scriptures and those who were recommended as candidates for the *Geshe* exams. The corruption eventually became so serious . . . and the 13th Dalai Lama tried very hard to strengthen monastic discipline and punish corruption, but he could not stop the trend (Zhu Jielin, 1990: 261–262)." Monastic education faced challenges even before the 1950s due to the corruption in monasteries and the influence of modern values and activities from both Han areas and India.

Education in Tibet was also of interest to some Western scholars. *The Making of Modern Tibet* (1996), written by Tom Grunfeld, has a section describing education before 1951. He classified educational institutions into four groups. According to Grunfeld there were two formal schools to train clergy and lay officials managed by the *Kashag* government. Students were "from 14 to 20 . . . [and] either from the noble families or those from former monk officials . . . Each school had only 20 to 30 boys at any one time." A second group was in the monasteries where "most only learned to recite the necessary prayers from memory." A third group were the educational programs for the children of noble and wealthy families who "hired tutors or, during the 20th century, began to send their children to India and Sikkim for an Anglo-India education, usually at Christian missionary schools." A final category were "ad hoc

schools run by roving teachers . . . One former noble suggests there were about 50 such schools in Lhasa, each serving about 75 to 100 children (Grunfeld, 1996: 17)." Most likely this latter group was the *Si-shu* private schools described above.

Melvyn Goldstein described two routes for lay officials. "To enroll a son as a government official, an aristocratic family had to educate the son either in one of the private schools in Lhasa or at home with private tutors . . . After this, the family registered the son as a 'student' in the *Tsi gang* Office (Revenue Office), usually at about age 14. Such 'students' underwent a loosely organized training program in which they studied subjects such as fractions and *diu*, the Tibetan method of making arithmetic calculations. After this training, *Tsi gang* 'students' could be nominated for appointment as full government officials (Goldstein, 1989a: 7)."

From the literature cited above, we can summarize by saying that there appeared to be five forms of formal education in Tibet before 1952: (a) monastic education (from apprentice to lama to *Geshe* and, finally, *Ganden Tripa*);[6] (b) a monk official training program where monks were trained in the Potala Palace after being recommended by the three major monasteries; (c) a lay official training program for children of the aristocracy who first graduated from *Si-shu* then attended *Tsi gang* schools; (d) a private-school system for aristocratic and wealthy children for the acquisition of basic knowledge; and (e) a modern school system managed by the Kuomintang government, mainly for Han children. Among the five types, the first was the most important in terms of the numbers who received an education. The total size of the second and third amounted only to about 100 while the fourth (*Si-shu*) was merely a preparatory stage for *Tsi gang* and for basic reading and writing, and reserved for children of wealthy families.[7] The fifth was introduced into Tibet from the Han regions but was limited in size and narrow in scope. Its graduates were expected to serve in the mission of the Kuomintang government in Tibet or with Han trading companies.

Actual educational situation among the Tibetans

The various modes of education in Tibet are discussed above, but what was the real situation in the cities, towns and villages? Apart from some general introductory remarks, there are almost no case studies or field-observation reports about the actual education situation in Tibet before 1952. Such reports were also rare even for the years 1952 to 1960.

From reports by the central government-sponsored investigations conducted in ethnic minority areas in the 1950s, small tidbits about mass education can be found. The survey in the Kormang Tribe (a group of herdsmen in traditional social organization in a pastoral area in Nagchu *dzong*) in 1958 reported that "there was no school, *Si-shu* or other learning facilities for this tribe. The only tribal intellectuals

were 46 monks and one nun who were studying at the Rinpung monastery (TSHSSEG, 1989a: 12)." The total population of this tribe was 750 in 1957. The monks and nun comprised 6.3 percent of the total population. The remaining 93.7 percent could not read, write or count, and they must have faced great difficulty when they had to deal with tribal chiefs and traders. The agricultural areas shared a situation similar to that of the pastoral areas. For example, in 1959, "there were a total of 581 residents in five estates in Taktse County. Illiterates comprised 94.7 percent (550 residents). Most of the literate were the estate owners and their children plus several monks. There were 369 people in Leme Commune in Lhoka Prefecture before liberation; only 25 of them were literate (3.5 percent of the total) (Lai Cunli, 1986: 41)."

Many monks were illiterate. "According to the survey in 1949, the *Luo se lin tra tsang,* a part of Drepung monastery, had about 4,000 monks, 80 percent of whom were illiterate (Yu Yonggui, et al, 1994: 134)." In general, "the educational systems were mostly concentrated in the three great monasteries in Lhasa. These monasteries were the centers of higher education in Tibet (Yang Shengying, 1989: 148)." If a large and wealthy monastery such as Drepung could not offer its monks a basic education, the educational opportunities for a majority of the monks must have been limited.

Characteristics of the Tibetan education systems in the past

Before 1952, Tibet was ruled as a theocracy and the religious establishment played a role similar to that of the Christian church in Europe in the Middle Ages. In the economic realm churches had vast estates and numerous serfs and collected taxes through a tithing system. Churches established a whole set of management institutions, regulations, religious rituals and priest systems . . . education became one of the major functions of the church. Churches controlled schools and decided what could and could not be taught. This religious domination over education hindered the development of science and mass education in Europe at the time.

In these respects Tibetan Buddhism in the first half of the 20th century shared many common characteristics with the Christian churches of the Middle Ages. In both, "the great religions prospered and overwhelmed the masses. Hierarchies in both the organized Christian Church in Europe and Lamaist monasteries in Tibet played a major role in society and in the government of the two areas (Karan, 1976: 12)." In a discussion about the cultural characteristics of the Middle Ages, Frederick Engels commented on the relation between church and education. "The Middle Ages emerged from a rough primary state, it cleared up all ancient civilization, ancient philosophy, politics and laws. Priests secured a monopoly status on education of knowledge and then education was penetrated with theology. Politics and law were in the hands of priests and they became the branches of theology as did all the sciences (Engels, 1850: 400)."

Until the middle of the 20th century a medieval regime was maintained in Tibet. "Before 1951 education was the monopoly of the monasteries that provided training for the elite to lead the country and for ecclesiastical careers. Secular education was nonexistent [except for the schools established by the Chinese government and mainly for Han students — note by Ma Rong]. Educational policies were viewed first and foremost in light of their bearing on the well-being of religion, which provided the philosophical and theoretical foundation for the educational system (Karan, 1976: 71)." Under this regime, "monasteries were schools, religion was education (Zhu Jielin, 1990: 2)." In general, "there were no schools besides monasteries, no education besides religion, and no teachers besides monks (Sun Ruoqiong, 1990: 253)."

Education was the most advanced in three famous monasteries in Lhasa. There were three levels in these monasteries: *kham tsen*, *tra tsang* and *laji*.[8] Monks were ranked in six groups: "living Buddha", professional monks who conducted religious rituals, monks who studied scriptures, handicraft monks, soldier and service monks and manager monks. Only the monks who learned scriptures (they were called *Bei qia wa* or "book readers") could receive a real education that allowed them to attempt a *Geshe* degree (Sun Ruoqing, 1990: 255). The "living Buddha" and monks who managed religious rituals also learn scriptures.

Monastic education in Tibet before 1952 had good and bad aspects. On the positive side of the ledger it was designed to serve specific tasks such as training a group of intellectuals to be translators, historians, writers and doctors, creating and compiling Tibetan historical classics, spreading knowledge of history, geography, astronomy and medicine, among the people, developing the Tibetan language, and teaching Tibetan script to a small proportion of the population. At the same time though there were also negative aspects such as the spread of the Buddhist notion of incarnation, which led people to worry more about their next life rather than pay attention to the development and improvement of the life they were in; the monopolization of education leaving the vast majority of Tibetans illiterate; the lack of interest in promoting modern science and technology; the lack of attention to social development as the monks studied scriptures and; as monasteries grew in size, the abandonment by more and more monks of a materially productive life, leaving an ever-increasing burden on the peasants and herdsmen to produce the products needed for everyone's survival (Li Yankai, 1989: 356–359; Dorji Tseden, 1991: 40–43).

The dominating influence of religion on education fell drastically during the 1960s and 1970s. Yet, now, owing to new liberal policies, religious institutions are once again exerting their influence and, consequently, finding themselves in increasing conflict with the trend toward modernization now underway in Tibet. The major positive aspect of monastic education was its ability to preserve traditional Tibetan culture, which is so tied up with Buddhism. The greatest traditional culture (literature, philosophy, medicine, architecture, astronomy, etc.) in Tibet has been

closely related to Tibetan Buddhism, but Tibetan Buddhism and its monasteries failed to catch up with modernization in the 20th century.

Development of Modern Education in the TAR since 1952

In the early 1950s education in Tibet got a boost when both schools and students increased. "From incomplete statistics, there were about 20 schools managed by the local government in 1952. There were about 95 *Si-shu* besides these schools. The total number of students was about 3,000 in the TAR (Liu Rui, 1989: 315)." Before 1951 there were only nine old-style official schools and a few *Si-shu* and family training programs in the whole region. Even in official schools, the curriculum was Buddhist scriptures. *Si-shu* and home-tutor programs did not constitute formal education in the modern sense. Because of the underdeveloped conditions of school education in Tibet before 1951, a Working Committee of Education was sent there by the central government in the early 1950s to pay special attention to the promotion of school education.

The development of modern school education in the TAR

The development of modern schools in the TAR since 1952 has been closely related to social changes and policy adjustment. The process can be divided into six periods accordingly. The first (1952–1957) was preparation and commencement. The second period (1958–1959) was the first adjustment period. The third (1959–1966) was a rapid-development period after land reform. The fourth (1966–1980) mainly coincided with the Cultural Revolution. The fifth period (1980–1995) was the second adjustment period accompanying the system reform throughout China. The last one (1996 to present) has been a period of development with adjustment. During the different historical periods, the development of school education in the TAR has experienced various influences and orientations under different political, economic and social systems. In the past six decades Tibetan society has experienced fundamental and immense changes in its structure, administration institutions and ideology, although progress has not been smooth because of an environment of political struggles and drastic social changes.

The preparation and commencement of modern education in the TAR (1952–1957)

According to the ninth item in the 17-Point Agreement of 1951, "the spoken and written language and school education of the Tibetan nationality shall be developed

step by step in accordance with the actual conditions in Tibet."[9] The Lhasa Primary School was re-established in August 15, 1952. In addition, 28 primary schools were established in Shigatse and other towns in 1953 and the number of students increased in the following years (Table 9.1). The Preparatory Committee of the TAR was established in 1956 with the Dalai Lama as Chair and the Panchen Lama as Vice Chair. The Committee had a Division of Culture and Education and under its auspices the first middle school in Tibet's history, the Lhasa Middle School, was established in 1956 with more than 200 students. By 1957 the number of primary schools had increased to 98 with 6,360 students. Although this period saw the opening of modern schools in central Tibet, schools managed by the *Kashag* government to train monk and lay officials, as well as private *Si-shu*, still existed. The three principals of the Lhasa Primary School were all senior lay and monk officers of *Kashag* government. "The first contingent of teachers included 10 Tibetan monk officers, seven Tibetan government officials, 10 teachers from Tibetan society, and 20 teachers sent from Central China (Bass, 1998: 30)." Therefore, the *Kashag* government had a strong influence in this school. There was a pattern of co-existence of several educational systems (Tanzen and Zhang Xiangming, 1991b: 304).

The first period of school adjustment (1958–1959)

Many Tibetan aristocratic families and senior monk officials strongly opposed social changes. In 1956 the Dalai Lama was visiting India on a religious pilgrimage. He threatened not to return to Tibet unless some policy changes were enacted. The central government responded by agreeing to new policies whereby it promised no social and political changes (especially land reform) for six years while also committing itself to reducing the central government's activities in Tibet. The Dalai Lama responded by returning voluntarily to Lhasa. As a consequence the planned land reform in Tibet was postponed. The number of cadres and workers (both Han and Tibetan) who had been sent to Tibet by the central government dropped from 45,000 to 3,700 in one year. The number of public primary schools declined from 98 to 13 by 1958, while the number of students in these schools decreased from 6,360 to 2,400 (Table 9.1). As part of the overall reductions brought about by these policies, the institutions responsible for education at the prefectural and county levels were abolished.

The period of establishment of school education after land reform (1959–1966)

Following the flight of the Dalai Lama in 1959, the Chinese government again accelerated its revolutionary program. In 1959 and 1960 it terminated the feudal serfdom and estate systems. All slaves and serfs were freed and they received land,

Table 9.1. Development of Education in the TAR (1951–2008)

Year	Primary School					Middle School (Junior / High school)				
	Number of schools	Students in school	New enrollment	Graduates	Teachers/ employees	Number of schools	Students in school	New enrollment	Graduates	Teachers/ employees
1951	1	60	-	-	-	0	-	-	-	-
1952	30	2000	-	-	-	0	-	-	-	-
1956	32	2900	-	-	-	1	558	-	-	-
1957	98	6360	-	-	-	1	700	-	-	-
1958	13	2400	-	-	-	1	180	-	-	-
1959	462	16300	-	-	580	2	342	76	-	42
1960	1268	41531	-	-	1571	4	627	184	36	66
1961	1536	58344	-	-	2059	5	675	215	64	78
1962	1415	53052	-	-	1832	6	670	244	66	87
1963	1540	53107	-	-	2005	6	733	255	130	98
1964	1683	59070	-	-	2466	7	769	297	112	119
1965	1822	66781	-	-	2475	4	1059	425	206	122
1966	2035	75029	-	-	2793	5	1333	265	178	158
1967	1906	70951	-	-	2693	5	1213	85	186	163
1968	1602	63635	-	-	2419	5	1081	50	345	159
1969	1479	59098	-	-	2363	5	445	52	524	163
1970	1707	69445	-	-	2552	5	909	807	423	179
1971	1958	83904	-	-	2804	6	1448	654	175	205
1972	2646	123550	-	-	4340	9	2463	1370	317	264
1973	3031	146220	-	-	5003	16	3600	1287	218	238
1974	2570	184446	-	-	6604	30	6828	3278	762	601
1975	4994	210365	-	-	8565	37	9520	4109	930	765
1976	6272	226799	-	-	9326	43	13494	5655	1511	1167
1977	6410	235872	-	-	10409	46	14447	5101	3322	1169
1978	6819	262611	-	-	12169	60	17679	6826	3950	1600
1979	6266	248000	64798	20934	11620	55	19788	7289	4231	1792
1980	6266	240811	61312	17051	13964	74	18797	8196	4573	1796
1981	4055	186882	38106	12199	10957	79	16917	6372	4303	1685
1982	2907	141587	25572	11088	9078	66	16767	6290	4470	1808
1983	2542	124612	30736	13585	9628	55	18158	6837	4609	1907
1984	2475	125469	43740	11500	9228	56	18887	7277	4247	2065
1985	2315	119939	25282	11381	9060	56	20422	6940	4547	2315
1986	2388	121156	30333	11724	9115	64	21949	7138	5464	2533
1987	2437	137069	32057	13167	8685	67	23881	8245	6200	2808
1988	2453	144809	37657	7467	9186	67	23439	7241	6081	3043
1989	2398	138875	34608	7483	9072	68	23226	7610	6672	3065
1990	2474	157402	38338	9314	9573	63	21303	6516	5873	3180
1991	2652	168062	41748	8607	9399	61	21802	7864	5773	3179
1992	2831	191768	52739	12403	9659	62	23251	9352	6943	3210
1993	3090	211872	52740	11443	10528	69	25693	9909	5564	3162
1994	3477	232976	63488	12594	12390	77	28725	10725	6309	3600
1995	3943	258651	59963	14412	14090	86	32711	12239	7155	3666
1996	790	284350	73218	15974	14712	88	34957	13301	8751	3982
1997	806	300453	59611	19378	14750	90	38413	14765	9782	4226
1998	814	310220	60385	24611	14659	90	39838	15484	11322	4469
1999	820	310437	58939	30725	14418	97	44207	18167	12092	4861
2000	842	313807	57969	37039	13936	98	55232	25662	12124	5176
2001	895	311993	58973	42044	12926	100	71710	33823	13184	5875
2002	899	319569	60824	43929	13631	103	90469	37973	15712	6500
2003	892	322060	58913	45695	13767	105	114136	46935	21290	7334
2004	886	326952	59126	45182	14378	110	135888	52715	31026	8247
2005	890	327497	54665	47960	14967	118	154048	56828	37080	9006
2006	880	329532	52864	48655	16446	118	165559	58237	45695	9477
2007	884	320589	51890	52238	18450	117	180210	67014	51795	10861
2008	885	311832	50937	52721	18715	119	184513	64954	55922	11525

Table 9.1. (Continued)

Year	Vocational (high) School					University/college				
	Number of schools	Students in school	New enrollment	Graduates	Teachers/ employees	Number of schools	Students in school	New enrollment	Graduates	Teachers/ employees
1959	1	1390	-	2287	396	-	-	-	-	-
1960	1	3045	2809	1141	542	-	-	-	-	-
1961	1	2926	63	180	513	-	-	-	-	-
1962	1	2478	-	436	519	-	-	-	-	-
1963	1	2308	-	275	496	-	-	-	-	-
1964	1	2400	664	469	659	-	-	-	-	-
1965	1	455	455	-	110	1	2251	910	1063	703
1966	1	665	300	89	110	1	2448	305	108	705
1967	1	665	-	-	110	1	2353	-	95	700
1968	1	625	-	40	110	1	1931	-	422	696
1969	1	-	-	625	5	1	878	-	1053	689
1970	1	-	-	-	25	1	-	-	877	599
1971	1	315	315	-	74	1	417	417	-	606
1972	4	706	503	106	113	1	892	513	38	708
1973	5	1038	495	159	163	1	984	148	56	734
1974	9	1330	749	604	338	1	1356	475	230	726
1975	23	2508	1902	311	338	2	1964	772	211	1005
1976	22	3639	889	72	718	4	2494	1057	423	1212
1977	22	4382	1663	763	824	4	2233	742	535	1477
1978	28	640	1893	1388	978	4	2081	711	783	1399
1979	28	5061	1899	1478	1025	4	1476	465	232	1601
1980	24	3489	334	1288	1174	4	1494	233	193	1689
1981	24	2327	310	1422	1241	4	1522	284	205	1459
1982	24	1573	422	1209	1254	4	1214	245	539	1690
1983	13	1403	542	257	757	3	1326	266	106	1566
1984	13	1826	904	435	856	3	1370	471	411	1615
1985	14	2249	615	133	945	3	1577	530	305	1750
1986	14	3062	1031	452	1078	3	1850	579	315	1675
1987	14	3231	913	667	1215	3	1801	404	424	2883
1988	15	3465	1060	833	1269	3	1736	568	683	1757
1989	15	3960	1150	581	1258	3	1973	670	394	1791
1990	15	4175	1171	900	1202	3	2025	645	587	1737
1991	15	4385	1117	895	1237	3	1961	552	543	1763
1992	14	4713	1303	1006	1315	3	2239	683	593	1773
1993	15	4948	1306	1080	1340	4	2813	1193	564	1744
1994	16	5190	1531	1291	1441	4	3280	1095	621	1771
1995	16	5575	1707	1196	1463	4	3878	1175	525	1818
1996	16	5383	1517	1353	1462	4	3412	909	1242	1720
1997	16	5730	1552	1366	1398	4	3200	717	857	1737
1998	16	5579	1300	1693	1320	4	3447	1385	1151	1762
1999	16	5672	1664	1427	1264	4	4021	1681	1066	1736
2000	12	6585	2957	1895	1255	4	5475	2320	764	1673
2001	11	6819	2089	1517	1254	4	6793	2420	1050	1836
2002	11	6437	2107	2311	1222	3	8438	3414	1686	1829
2003	10	6718	2203	1973	1108	4	10409	4279	1745	1794
2004	10	8549	4223	2544	1155	4	14731	6009	2108	1913
2005	10	7027	2856	2930	1214	4	18979	7589	3172	2033
2006	10	14775	2336	2280	753	6	23327	8359	3846	2669
2007	7	18958	6654	2197	725	6	26767	8046	4346	2888
2008	7	21003	5219	2436	745	6	29409	8526	5840	2990

Sources: SBT, 1989: 542–546; 1991: 392–394; 1995: 282–284; 1999: 290–292; 2009: 252–255. Liu Rui, 1989: 323. Liu Qinghuei, 1985: 28.

animals, housing, and other properties from their former owners through a per capita equal distribution. They now needed the skills (reading, writing and counting) that would allow them to manage their daily economic activities. Under the new social conditions, many of the public schools that closed in 1958 were reopened. In November 1959, a policy of "having private schools [called community schools] as the main source of education with public school as supplementary" was introduced by the Preparatory Committee of the TAR (Zhou Wei, 2003: 247).

In 1959, in order to encourage Tibetans to enter school, the age requirement for primary school enrollment was set between six and 20. By the end of 1959 schools run by local communities had reached 450 with 13,000 students. These community schools increased to 1,496 with over 52,000 students in 1961 (Dorji Tseden, 1991: 91). In 1964 the primary school education was adjusted from five years to four years and the highest enrollment age for primary school was lowered to 16 (Zhou Wei, 2003: 249). In 1966 the number of public primary schools was 82 with 11,200 students. Meanwhile the number of community schools had increased to 1,953 and the number of students to about 64,000. Because this period emphasized "mass education," it was also called the "quality strategy" period (Bass, 1998: 39).

The number of middle schools had grown from one to five and their students increased from 342 in 1959 to 1,333 in 1966. The Lhasa Normal School was established to train teachers in the following year. This school was closed in 1962 and reopened in 1965 as the Normal School of the TAR. The Lhasa Middle School started its high-school classes in 1963. This was the first high school in Tibet's history. The first college in Tibet, the Lhasa Normal College, upgraded from the Lhasa Normal School, was established in 1965. The enrollment rate of school-age children increased from one percent in 1959 to about 30 percent in 1966.

During this period, monastic education continued in parallel with public schools. It was closed by the Red Guards (both Han and Tibetans) when the Cultural Revolution moved into the TAR in 1966. Many monasteries were also destroyed. The damage caused by this political movement was more serious in ethnic-minority regions such as the TAR.

Modern schooling could not find a foothold in Tibet as long as the monastic community had the power to oppose it. The experiences of the English-style schools that were founded in Gyantse in the 1920s and in Lhasa in the 1940s were good examples. "The monk-official segment and the monasteries strongly objected to the school, fearing that it represented a major threat to religion and to the Tibetan monastery system" and these schools were soon closed (Goldstein, 1989a: 422).[10] Modern education could only be developed as a result of land reform and the impact of these schools and their graduates has been significant to Tibetan society since the 1960s.

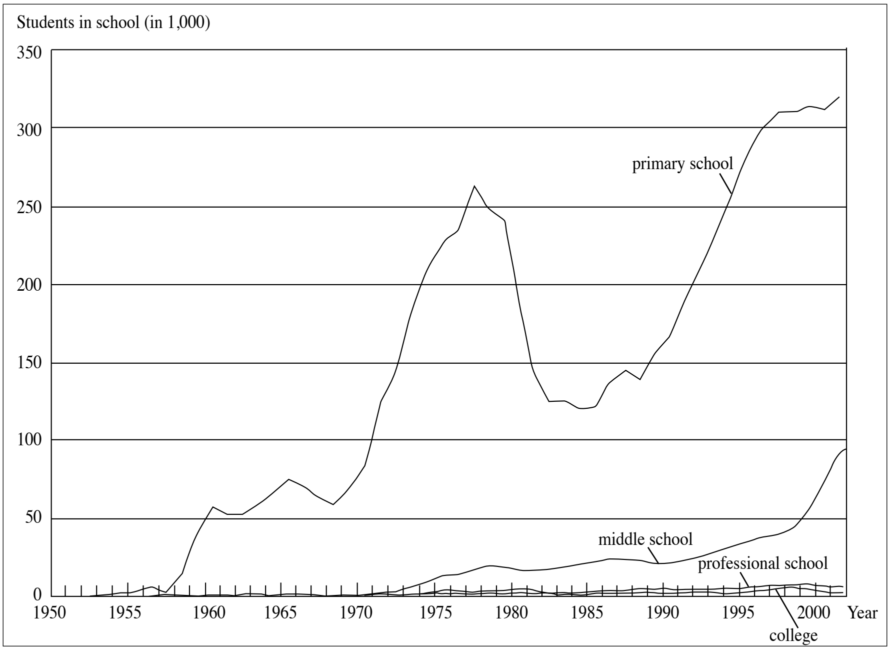


Figure 9.1. Educational Development in the TAR (1952–2002)

The period of the Cultural Revolution (1966–1980)

In the TAR as well as in other parts of China, colleges and vocational schools ceased to function from 1966 to 1970. Normal operations in Tibetan College (in Xianyang, Shaanxi Province) and the Normal School of the TAR were seriously affected in 1966, leading to their formal closure in 1970. There was a rapid decline in college enrollment in the TAR (from 265 in 1966 to 52 in 1969) and a great loss of teachers in vocational high schools (from 659 in 1964 to five in 1969). No primary or middle schools could function normally for four years after 1966.

Considering primary and middle schools, the period after 1970, led by the radical idea of mass education, the Revolutionary Committee of the TAR, which had replaced the TAR government in 1968, heralded an unrealistic goal of developing "middle schools in all counties, complete primary schools (grades 1–6) in all districts, community schools (grades 1–3) in all production teams (villages), and the universalization of primary school education" for all school-age children in the TAR within five years. Primary schools increased from 1,479 in 1969 to 6,266 in 1979. In 1979, 90.8 percent of primary schools belonged to community schools; only 3.8 percent had classes from first to sixth grades, and more than 70 percent of teachers in rural schools were not qualified (Zhou Wei, 2003: 247–248).

These newly established schools could not possibly provide qualified teachers and a reasonable education in a short time. This was an unusual increase from 1971 to 1976 just as the 1966 to 1970 period saw an unusual decline. In general, the Cultural Revolution years were a disaster for school education, political life and economic development in not just the TAR but the whole of China.

The second adjustment period (1980–1995)

All aspects of Chinese society experienced fundamental changes accompanying the system reform policies that were initiated in the early 1980s after Deng Xiaoping's return to the leadership. Communes were dismantled, land and animals were redistributed among peasants and herdsmen, private business was encouraged and free markets and small entrepreneurs flourished. All these changes took place in the TAR albeit on a much smaller scale than in coastal regions. The new policy gave religious activities more room in the TAR. The open-door policy led to more cross-border travel and visits between the TAR and India and Nepal. Temporary migrations became a significant factor in the social life and economy of the TAR.

The First Tibet Work Conference in 1980 suggested a new guiding policy for educational development in the TAR: "gradually develop primary schools, reduce illiteracy in the Tibetan language by having all students of Tibetan, Han and other ethnic groups learn Tibetan, transfer the community schools into public schools, develop junior middle schools and high schools, publish Tibetan textbooks and improve teaching quality." Then the emphasis was switched from community schools to public schools. Under this new policy all schools in the TAR were reorganized and greatly improved. The number of primary schools declined from 6,819 in 1978 to 2,437 in 1987, and the number of students in school declined from 262,611 in 1978 to 119,939 in 1985, going up to 137,069 in 1987 because schools of poorer quality were closed. Meanwhile, the number of teachers remained the same or saw an increase. Teaching quality in all schools generally improved, but the decline in the number of students in school certainly had a negative impact on mass education in the TAR.[11] This policy adjustment was interpreted by Catriona Bass as the switch from "quantity strategy" to "quality strategy (Bass, 1998: 41)."

The Second Tibet Work Conference, in 1984, produced documents regarding education in the TAR. The TAR government issued "the method of *san bao* (three guarantees: food, clothing and lodging) in 'key' public middle and primary schools" in April 1985. There were some adjustments in the implementation of this program. The government report shows that in 1990, 40 percent of students in the TAR received benefits from the program. But "most rural schools, where 75 percent of primary pupils study, provide education to grade three at most and therefore these students are not eligible for the grant . . . (at the same time in some poor areas) the children's bursary becomes the family's means of survival (Bass, 1998: 117)."

The use of the Tibetan language in education made 1987 an important year. On July 9, 1987, the 10th Panchan Lama and Ngapo Ngawang Jigme together proposed using Tibetan as the main teaching language in schools. In 1987 and 1988 the TAR government issued several documents that provided detailed regulations on the use of Tibetan in administration, public life, and schools. The regulations, issued in 1987, required all courses to be taught in Tibetan in primary schools for Tibetan pupils, and that they learned Putonghua as a second language beginning in grade four (grade three for urban pupils). For Tibetan students Tibetan should be the main teaching language in middle schools and universities. Han students in the TAR also should learn Tibetan at a certain grade (Zhou Wei, 2003: 96–97; Bass, 1998: 53). The second clause of "the several regulations of learning, using and developing Tibetan language in the TAR," issued by the TAR government on July 9, 1987, required that "both Tibetan and *Putonghua* are used in administration but Tibetan is the main language." The third clause of this document required that "all Tibetan students in various schools should learn Tibetan as their main language course; other courses in principle should use Tibetan as the language of instruction." The policy demanded that "all Tibetan students in universities, colleges and professional higher schools should be taught in Tibetan while most Tibetan students in primary and middle schools should also be taught in Tibetan. Tibetan and Han students in primary and middle schools should be taught in separate classes using different languages (Zhou Wei and Kelzang Gyaltsen, 2004: 54)."

During our survey in Lhasa in 1988, we found some cases in which Tibetan parents wished to send their children to classes taught in Putonghua, but were turned down because the schools had to follow government policy guaranteeing all Tibetan students be taught in Tibetan. I was told of some senior Tibetan leaders who insisted on this policy at government meetings but actually sent their children to Chengdu (capital of Sichuan province) so they could be educated in Putonghua. They were being pragmatic because being educated in Putonghua usually results in more job opportunities and the likelihood of promotion when they begin their careers. Children who cannot speak fluent Putonghua are limited to jobs in the TAR and local administration.

Another important measure strengthening education in the TAR was introduced in 1985 when Tibetan middle schools were established in the Han regions. These schools took advantage of local school facilities, higher-quality teachers and the more developed social environment of China's coastal and metropolitan areas (Zhu Zhiyong, 2007: 2–3). A total of 19 provinces and municipalities participated in this project. All relevant expenses of the Tibetan schools or Tibetan classes in these schools were arranged by the central governments and shared by the central government, the TAR government and host provinces.[12] This arrangement was very similar to developmental projects begun in the 1990s in which the central government asked each provincial government to be responsible for undertaking a construction project in the TAR at their own expense.

From 1985 to 2006 a total of about 33,100 minority students (Tibetan, Monba and Lhoba) were in 108 classes designed especially for them in schools in inner provinces. The total number of students in these schools was around 19,000. During the 20-year period, 6,780 students graduated from vocational schools, 3,430 students from normal schools and 3,900 students from college/universities, while 258 students received master/doctoral degrees. All the above 14,000 graduates returned to the TAR (*Xinhua News Network*, Feb. 21, 2007). From responses in interviews with the Tibetan students who attended the inner class/school, it seems that most of them wished to and did return to the TAR after graduation for various reasons (Postiglione, et al, 2009).

Several characteristics of educational development during this period need to be pointed out: (a) the policy changed from emphasizing community schools to public schools. The community schools were managed by communes and brigades and most of their teachers had no school training background; many were monks. The government-managed public schools had stable financial budgets and their teachers received systematic training; (b) investment in education increased and greatly improved the infrastructure of schools. The annual budget for education increased from 21.9 million yuan in 1979 to 86 million yuan in 1985, and then to 297.2 million yuan in 1995; (c) based on a policy of giving "priority to ethnic minority students in recruitment," the hope was that in Tibet "minority students in universities/colleges would comprise more than 50 percent of the total while in professional high schools enrollment would comprise more than 70 percent;" (d) tuition for compulsory education has been free in the TAR since 1980 (and free throughout China since 1986). In "key" (*zhongdian*) schools as well as in some border areas, boarding schools provided three guarantees (dormitories, clothes, meals and textbooks) to students; and (e) Tibetan as the language of instruction was mandated. The TAR government gave special attention to Tibetan students and directed a number of affirmative-action policies toward the Tibetans.

The new period of educational development (1995 to present)

From Table 9.1 it is clear that the number of students at all levels of schooling has increased considerably. But at the same time, the number of primary schools declined dramatically from 3,943 in 1995 to 790 in 1996 because of schools adjusting and merging. From the enrollment rates of school-age children (seven to 11 years old), graduation rates and enrollment in upper-level schools (Table 9.2), we notice significant changes over time. The enrollment rates for primary school fell from 76 to 78 percent in the early 1980s to 42 percent in 1983 owing to adjustments of the school system, and then increased to 98.2 percent in 2007. The percentage of enrollment in junior middle schools by graduates of primary schools went up and down. It was 29.6 in 1981, reached 87.3 in 1994, dropped to 45.2 percent in

1999 because of schools' adjustment, and then increased to the highest year of 2007 (97.1), then reduced to 93.8 in 2008. A similar drop in the enrollment rate of junior middle school to high school/vocational school also experienced in the TAR, from 58 percent in 2007 to 48.8 percent in 2008. Such a significant drop needs further study (SBT, 2009: 259).

Table 9.2. School Enrollment Rates of School-Age Children and Their Graduation Rates (%)

Year	Enrollment rate of primary school age children (age 7–14)	Rate of primary school graduates to enter junior middle school	Rate of junior middle school graduates to enter high (or vocational) school
1981	76.0	29.6	-
1982	78.0	41.1	38.1
1983	42.1	49.7	39.2
1984	46.3	44.0	36.0
1985	46.0	44.9	49.4
1986	50.0	47.9	44.4
1987	48.4	53.2	48.8
1988	55.7	39.6	41.3
1989	53.1	73.6	40.7
1990	67.4 *	62.1	36.2
1991	45.6	67.7	32.9
1992	52.4	62.7	32.4
1993	58.9	74.0	30.2
1994	66.6	87.3	29.9
1995	70.4	67.7	43.2
1996	73.5	66.7	35.6
1997	78.2	61.7	52.8
1998	81.3	62.9	47.1
1999	81.7	45.2	66.6
2000	85.8	55.0	82.5
2001	87.2	67.0	73.3
2002	88.3	71.1	77.3
2003	91.8	82.9	72.1
2004	94.7	92.3	61.7
2005	95.9	91.7	50.5
2006	96.5	92.0	42.5
2007	98.2	97.1	58.0
2008	98.5	93.8	48.8

* This rate was 54.6% in an earlier yearbook (SBT, 1991: 396).
Sources: SBT, 1995: 285; 1999: 276; 2003: 269, 2009: 259.

A key national project of the Chinese government in the 21st century has been the implementation of nine years of compulsory education. In 2003 the TAR government set up a goal to implement "six-year compulsory education" by 2005 and "nine-year compulsory education" by 2010 in all 74 counties of the TAR.

To reach the goal, each county in the TAR had regulations to encourage the implementation of the education project and to punish officers responsible if targets were not met. For example, a document of Kongpo Gyamda County government issued in 2003 lists the goals, responsibility of individuals and relevant penalties. All officials were required to sign the relevant contract, which stipulated that checks would be carried out from March 10 to 15 and September 1 to 5 each year. If the schools reached the target enrollment rates (98 percent for primary school and 95 percent for junior middle school), the Xiang in which the school was situated would be awarded 2,000 yuan. If the target was not reached, that means the enrollment rate was under 98 percent for primary school or 95 percent for junior middle school, the Xiang government had to pay a 50 yuan penalty for every vacancy under the target rates, its chief administrative official and party secretary had to pay a 20 yuan penalty, and the cadre working in the village had to pay 20 yuan (Lu Aiguo, 2005). It is possible that false figures were reported to higher authorities by Xiang administrations in order to avoid such penalties, but we do not know how serious this problem is.

In January 2008 the TAR government announced that among 74 counties, 63 were covered by "nine-year compulsory education" and illiteracy in adults had fallen to 4.8 percent. The enrollment rate of primary school and junior middle school reached 98.2 percent and 90.7 percent respectively. The "three guarantees" subsidy increased from 600 yuan for primary students and 800 yuan for junior middle school students in 2002 to 1,200 yuan and 1,350 yuan in 2008 respectively (*China Broadcast Network*, January 1, 2008).

On the other hand, the percentage of enrollment in high schools among graduates of junior middle schools remained around 40 percent in the early 1990s and increased to 66 percent in 1999, fluctuating between 72 and 82 percent in the years 2000 to 2003, then dropping to 41.3 percent in 2007. This phenomenon should be given more attention and the factors affecting this trend should be carefully analyzed. When high-school students cannot enter university or find respectable jobs, the enthusiasm of graduates of junior middle schools for attending high school falls. Since high school is not compulsory, tuition and other expenses might be another reason behind reduced high-school enrollments. Because TAR yearbooks do not provide data separately for junior middle school and high school, the rate of high-school graduates entering universities cannot be calculated.

The students in the "three guarantees" program made up more than one-third of the total number of students in the TAR in the early 1990s.[13] This "three guarantees" policy is, however, expensive. Some parents received school stipends for their

children as part of their family's regular income, and some local cadres received grants for schools (for dormitories, classrooms, equipment, etc.) as part of their management income. Since the budget of the "three guarantees" program tallied 45 percent of the total educational budget, the regulations will have to be adjusted to accommodate the growing number of students as well as inflation (Wangdu, 1995: 70). Compared with other provinces or the whole nation, education made up a bigger percentage of the total government budget of the TAR and in 2000 reached 10.02 percent (the national level is less than four percent of GDP).

Educational achievement in the TAR according to the census data

Educational structure of the population in the TAR

Educational achievements, based on the 1982, 1990 and 2000 censuses and divided into rural and urban categories, are presented in Table 9.3. In this table "persons" refers to anyone over six years old. The numbers in this table include all people living in the TAR regardless of ethnicity. It should be pointed out that educational achievement in China today is very narrowly measured by the total numbers of graduates at various levels of schools and the percentages of student enrollment in various school-age populations. Those are basic and useful indicators of educational development, but miss many important facets such as capacity for innovation, applied skills and social norms. The neglect of these areas has been the major criticism about school education in China for the past several decades. But in this chapter, discussions focus on the official statistics in order to grasp the main picture and trends in school education in the TAR.

In comparing the data it is obvious that education in the TAR improved between 1982 and 2000, during which illiteracy in the TAR fell from 74.3 percent to 52.9 percent. The decline of illiterates was due mainly to the development of primary schools. But we should note that although the number of illiterates fell as a percentage of the total population, the absolute number of illiterate Tibetans increased by 41,618 because the total size of the school-age population grew by 722,807 in the 18 years, due to high fertility.

By 1982 the educational infrastructure in the Lhasa Urban District was similar to that of the six major towns in Tibet but very different from that of the rural areas in the TAR. The educational levels of the cities and towns in 1990 seemed to diminish in comparison to 1982 because of a higher illiteracy rate (from 26.7 percent in 1982 to 37 percent in 1990 in cities and 26.5 percent to 46.3 percent in towns). But the data are misleading as the areas surveyed were different. In 1990 the data for cities added Shigatse and the data for towns added 24 less-developed county towns in addition to the six prefectural capital towns. So the increase in illiteracy can be explained by the wider surveys in 1990.

Table 9.3. Educational Achievement of Rural-Urban Residents in the TAR

Educational Achievement*	1982 Census							
	Lhasa Urban District		6 towns**		Rural areas		Total	
	Persons	%	Persons	%	Persons	%	Persons	%
Illiterate	25,201	26.7	15,524	26.5	1,139,160	79.4	1,179,885	74.3
Primary school	37,437	39.7	22,528	38.4	248,471	17.3	308,436	19.4
Junior middle school	20,548	21.8	20,582	35.1	46,898	3.3	68,232	4.3
High school	7711	8.2					22,925	1.5
University/college	3,440	3.6					8,022	0.5
Total	94,337	100.0	58,634	100.0	1,434,529	100.0	1,587,500	100.0
Educational Achievement*	**1990 Census**							
	City (Lhasa and Shigatse)		Towns		Rural areas		Total	
	Persons	%	Persons	%	Persons	%	Persons	%
Illiterate	71,830	37.0	73,297	46.3	1,166,486	77.2	1,311,613	70.4
Primary school	61,449	31.6	45,943	29.0	300,547	19.9	407,939	21.9
Junior middle school	32,766	16.9	22,766	14.4	28,992	1.9	84,524	4.5
High school	11,290	5.8	6,449	4.1	4,562	0.3	22,301	1.2
Vocational school	9,651	4.9	6,592	4.2	8,020	0.5	24,263	1.3
University/college	7,293	3.8	3,163	2.0	1,961	0.1	12,417	0.7
Total	194,279	100.0	158,210	100.0	1,510,568	100.0	1,863,057	100.0
Educational Achievement*	**2000 Census**							
	City (Lhasa and Shigatse)		Towns		Rural areas		Total	
	Persons	%	Persons	%	Persons	%	Persons	%
Illiterate***	38,438	18.8	73,412	27.6	1,109,653	60.3	1,221,503	52.9
Primary school	60,613	29.6	99,538	37.5	636,291	34.6	796,442	34.5
Junior middle school	52,983	25.9	48,357	18.2	64,617	3.5	165,957	7.2
High school	20,282	9.9	12,410	4.7	9,726	0.5	42,418	1.8
Vocational school	15,214	7.4	20,153	7.5	15,063	0.8	50,430	2.2
University/college****	17,119	8.4	11,844	4.5	4,594	0.2	33,557	1.5
Total	204,649	100.0	265,714	100.0	1,839,944	100.0	2,310,307	100.0

* It includes: (1) graduates, (2) those who studied and left school without a degree, (3) those who are still in school.

** The capital towns of six prefectures.

*** Includes those who attended "literacy class."

**** Includes those who graduated from (1) four-year university, (2) two-year college and (3) received Master/Doctoral degrees.

Sources: Liu Rui, 1989: 316; Census Office of the TAR, 1992b: 60–133. 2003c: 1056–1063.

Table 9.3 includes 82,855, 76,439, and 158,570 Han in 1982, 1990, and 2000 respectively. The Han in the 1980s and 1990s were mainly young cadres, teachers, technicians and workers with a relatively higher educational background who went to the TAR to serve for a fixed period of time. The Han in 2000 also included temporary migrants. This factor should be taken into account when we examine the education data.

Table 9.4. Educational Achievement* of the Tibetans, Monba, and Lhoba above Age 6 in the TAR

Education achievement	**The 1982 Census**		**The 1990 Census**		**The 2000 Census**	
Tibetans	Persons	%	Persons	%	Persons	%
Illiterate**	1,170,626	78.1	1,180,964	66.7	1,203,605	56.4
Primary school	276,699	18.5	487,932	27.5	751,651	35.3
Junior middle school	38,406	2.6	64,151	3.6	101,441	4.8
High school	9,441	0.6	10,312	0.6	19,077	0.9
Vocational school***	-	-	20,856	1.2	37,845	1.8
University/college	2,806	0.2	7,062	0.4	17,421	0.8
Total	1,497,978	100.0	1,771,077	100.0	2,131,040	100.0
Monba	Persons	%	Persons	%	Persons	%
Illiterate**	484	49.0	4,669	76.9	4,376	56.6
Primary school	415	42.0	1,061	17.5	2,381	30.8
Junior middle school	106	10.7	176	2.9	543	7.0
High school	25	2.5	16	0.3	106	1.4
Vocational school***	-	-	107	1.8	199	2.6
University/college	16	1.6	42	0.7	120	1.6
Total	988	100.0	6,071	100.0	7,725	100.0
Lhoba	Persons	%	Persons	%	Persons	%
Illiterate**	767	82.8	1,326	68.7	1,312	51.1
Primary school	223	24.1	475	24.6	932	36.3
Junior middle school	39	4.2	78	4.0	207	8.1
High school	11	1.2	10	0.5	30	1.2
Vocational school***	-	-	31	1.6	59	2.3
University/college	7	0.8	11	0.6	38	1.5
Total	926	100.0	1,931	100.0	2,568	100.0

* Includes graduates, those who are not studying for a degree and those still in school.

** "Illiterate" in 2000 includes persons who attended "literacy class";

*** Vocational schools are different from normal high schools in recruitment procedures and curricula; the most important difference is that vocational school graduates are guaranteed jobs in state sectors, and graduates from normal high school will take national exams for college enrollment. When they pass the exams, they enter college. If they fail the exams, they have to look for jobs on their own.

Sources: COT, 1983c: 6–7; 1992a: 388–393; 2002a: 164–169.

The educational progress of the Tibetan, Monba, and Lhoba populations from 1982 to 2000 is shown in Table 9.4. In the 18-year period, illiteracy in the Tibetan population decreased by 21.7 percent. During the same period the total number of school-age Tibetans (six and above) increased by 633,062 while the absolute number of illiterates increased only by 32,979, and primary school graduates (and students) increased by 474,952. Therefore, this progress was due mainly to the rapid development of primary-school education. Table 9.4 also shows that significant progress was made at all levels in the educational system, especially the professional vocational schools.

The Monba and Lhoba living in southern border areas share a similar pattern of education development and remained at the low end of educational achievement in general compared with other major groups in China. Since the population sizes of Monba and Lhoba are relatively small (8,923 and 2,965 persons in 2000 respectively), the discussions in this book focus on Tibetans.

Educational structure of the working population in the TAR

The education system is one of the most important indicators of progress of an ethnic group or population. The educational achievements of the working population (above age 15) are presented in Table 9.5. It should be pointed out that educational levels were taken to be the same whether the students spoke Tibetan or Putonghua. There are two parallel school systems in the TAR, each using either Tibetan or Putonghua as the language of instruction. Students in Tibetan schools learn Putonghua as a second language usually in their third or fourth year of primary school and start to learn English in middle school. The students in Han schools learn Tibetan and English as their second and third language.

About 5.1 percent of "professionals" in 1982 were illiterate or semi-illiterate[14]; this increased to 6.3 percent in 1990 and fell to 4.4 percent in 2000. The percentage of those who had high school or vocational-school education among professional employees was only 34.8 percent in 1982; it fell to 32.5 percent in 1990 and then rose to 58.3 percent in 2000. These numbers create some concern about the quality of those in jobs labeled "professionals" in the TAR. In the Han areas only those with vocational school or college educations or above could be classified as "professionals." According to the 2000 census, only 1.5 percent of "professionals" were those who either "never attended school" or only attended "literacy class" in China. There are exceptions in other regions for skilled people (e.g. handicraftsman or local opera performers) who have acquired special traditional skills without a formal education listed in this category after having passed certification procedures, but these exceptions were very small in number. It is worth noting that the low level of schooling among "professionals" in the TAR is bound to have a negative impact on its future development.

Table 9.5. Educational Achievement of the Working Population by Occupation* in the TAR

Census	Education	Professional	Leader	Clerk	Trade worker	Service worker	Agricultural labor	Manu/ transpo. labor
1982	Illiterate/semi-illiterate	5.1	15.3	5.7	19.4	40.6	83.4	40.5
	Primary school	28.5	38.2	34.2	5.09	43.3	15.5	39.9
	Junior middle school	31.6	27.7	36.7	24.0	14.0	1.1	16.4
	High/Professional school	23.6	12.7	17.8	5.2	2.0	0.0	3.1
	University/college	11.2	6.1	5.6	0.5	0.1	0.0	0.1
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1990	Illiterate/semi-illiterate	6.3	7.5	3.7	33.0	31.0	79.4	32.8
	Primary school	39.2	33.4	20.7	39.1	38.8	19.7	40.1
	Junior middle school	22.0	21.5	39.7	21.8	23.0	0.8	21.4
	High/Professional school	23.7	25.3	29.3	5.8	6.7	0.1	5.4
	University/college	8.8	12.3	6.6	0.3	0.5	0.0	0.3
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2000	Illiterate/semi-illiterate	4.4	5.6	7.8	20.9		67.8	24.3
	Primary school	19.0	17.3	14.4	31.2		30.0	35.9
	Junior middle school	18.3	17.2	22.1	35.5		2.0	29.6
	High/professional school	40.0	36.7	34.1	10.9		0.2	9.1
	University/college	18.3	23.2	21.6	1.5		0.0	1.1
	Total	100.0	100.0	100.0	100.0		100.0	100.0

* An occupation was labelled "others" in census categories. This category was omitted because of its small size; The categories of "trade worker" and "service worker" were combined in 2000 census.
Sources: COT, 1992b: 390–421; 2002b: 780–795. He Jingxi and Wang Jianmin, 1995: 25.

As to the category of "leader" (the leading officials of the administration and government-related institutions and enterprises), a higher percentage of this group achieved more education in 1990 compared with 1982. But it is surprising to see how high the illiteracy rate is even among leaders (5.6 percent in 2000). Many Tibetan government functionaries (cadres) were serfs before 1959 and some obtained their important positions after having participated in training programs to learn how to read and write while some local cadres at the *xiang* were appointed without the ability to read and write. In comparison, the national rate of illiteracy among "cadres" was only 0.28 percent in 2000 (Census Division of State Statistical Bureau, 2002b: 1409–1413).

The obvious improvements in the "cadre" category's educational standards (15.3 percent in 1982 and 5.6 percent in 2000) might be the result of three possibilities. The first is that a large number of high school/college graduates became

cadres soon after graduation. The second is that some of the cadres raised their educational levels through participation in training programs or, perhaps, even went to school. The third is that it is also possible that some people with higher-education backgrounds transferred from other occupations into the cadre category. So it is possible that some professionals (college teachers) with higher education became cadres, thereby increasing the educational levels of the cadres while simultaneously lowering the educational level of the professionals.

Clerks are low-ranking office staff. They are assistants to leaders and despite their low status they are very important in keeping offices functioning. It should be pointed out that often the educational levels of clerks are higher than that of leaders in China. The government chooses leaders according to political concerns and clerks by their education and skills. Actually, many Han employees, who were sent to work in the TAR for a fixed period, worked as clerks while many less-educated local Tibetans worked as leaders. It is common in China that in ethnic minority regions Han assistants have a stronger background in school education than their bosses. First, minority employees are natives who are more acceptable to the local communities. Second, the national "Law of Regional Autonomy of Ethnic Minorities" requires that the administrative leaders in all the autonomous areas must be selected from the local ethnic groups. These are the two conditions that create the unusual education pattern in minority areas.

The "trade laborer" group refers to those working in the trade sector, mainly salesclerks in retail shops. From 1982 to 1990 this group maintained a generally low educational level and their percentage of illiteracy increased from 19.4 percent to 33 percent. The government expanded its retail-sales operations into the villages and recruited many rural laborers. In contrast, although the educational levels of "service workers" were lower than that of "trade workers" (40.6 percent illiterates in 1982), they managed to elevate their educational status by recruiting new employees from primary and junior middle school graduates. In the 2000 census, these two categories were combined. The percentage of these two groups together with junior middle school education or above increased to 47.9 percent in 2000.

The educational levels of "manufacture/transportation laborer" also improved but its illiteracy rate was still 24.3 percent in 2000. The figures demonstrate that for the labor force of second- and third-tier industries in the TAR formal education remained very low.

People categorized as "agricultural/pastoral labor" constituted 80.6 percent of the total labor force of the TAR in 2000. The rate of illiterates and semi-illiterates in this group was 83.4 percent in 1982 and 67.8 percent in 2000. The rate of high-school education or above in this group was about 0.2 percent. The huge number of illiterate peasants and herdsmen in Tibet is the largest obstacle to modernization in rural areas.

Rural-urban educational gap in the TAR

If we look at the censuses closely, it is clear that the cities always had a more advanced educational system. The best primary and middle schools, more qualified teachers and all universities are located in cities. The prefectural towns and county towns have less administrative and financial resources than cities do, and may have some good primary and middle schools. The rural areas have the worst conditions for developing education, sometimes there are no high schools at *xiang* sites and the conditions in rural primary schools are usually poorer than those in towns. The rural-urban educational gap can be seen in the comparison of school enrollment (Table 9.6).

Table 9.6. Enrollment Rates for Primary Schools for Children (Age 7–11) in the TAR

Locations	1988	1989	1990
City (Lhasa and Shigatse)	88.8	87.3	89.4
Prefecture town	99.6	100.0	63.2
County town	69.0	86.2	54.6
Rural villages	49.4	43.3	50.7
Total	55.7	53.1	54.6
Females in total	54.3	47.6	63.1

Source: SBT, 1989: 549; 1991: 396.

The school enrollment rate in the urban areas remained around 87 to 89 percent in the late 1980s while the rate obviously declined in prefectural capitals and county towns in 1990. From Table 9.1 we learn that from 1989 to 1990 new students in primary schools increased 10.8 percent; the reasons for the decline in towns remain unknown. The enrollment rates in rural areas stood at about 50 percent. The improvement of primary school education in the rural areas and towns is the key for future educational development in the TAR; that is why the TAR government set a goal of "universalizing six-year education" in the 1990s. Among the total 72 counties in the TAR, 28 had reached this goal by 2000 and another 12 are scheduled to reach it soon.

The educational picture in the Lhasa Urban District according to the 1982, 1990 and 2000 censuses is depicted in Table 9.7.

While the percentage of illiterate Lhasa residents declined by only 8.9 percent between 1982 and 2000, the percentages of educational groups above high school increased, with the largest gains in vocational schools and college/universities. The total school-age population (age six and above) in Lhasa increased by 115,367 and illiterates increased by 12,080 from 1982 to 2000. Since the number of temporary migrants in urban Lhasa increased rapidly, the new illiterates might be mainly

Table 9.7. Educational Achievement of the Population at Age 6 and Above in the Lhasa Urban District

Educational Achievement	The 1982 Census		The 1990 Census		The 2000 Census	
	Population	%	Population	%	Population	%
Illiterate	25201	26.7	31811	25.1	37281	17.8
Primary school	37437	39.7	41296	32.6	64918	31.0
Junior middle school	20548	21.8	28344	22.4	54912	26.2
High school	7711	8.2	10190	8.1	20400	9.7
Vocational school	-	-	8082	6.4	15069	7.2
College and above	3440	3.6	6877	5.4	17124	8.1
Total	94337	100.0	126600	100.0	209704	100.0

Sources: COT, 1983c: 22–23; Planning Committee of the Lhasa Urban District, 1990: 319. SBT, 2002a: 102–103, 108–109.

Tibetans from nearby rural areas. Our survey on temporary migration in 2005 found that about 33 percent of temporary Tibetan migrants were illiterate.

In general, the most serious issue regarding education in the TAR and other Tibetan areas today is the rural-urban gap. The 2000 census of the TAR (Table 9.3) shows that 60.3 percent of the rural population above age six remained illiterate and 34.6 percent received primary-school education. Therefore, only five percent of the rural population received education beyond primary school; in comparison, 51.6 percent of the city population received at least junior middle school education. For many reasons, such as a lack of qualified teachers, parents being less-educated, distance from home to school and cultural environment, the quality of school education in rural areas was far below that of urban schools. In some remote areas, there was one teacher per school. Because of the very low incomes of rural teachers, many rural teachers want to transfer to other regions. After graduating from primary school, many rural Tibetan children do not want to work as farmers or herdsmen. When they move to cities, they cannot land government jobs that are open mainly to college graduates. Because of their lack of applied skills and Putonghua ability, they always face some difficulties in city job markets. Their population size is increasing because of high fertility, and their complaints are also growing as more and more young laborers are moving to cities and confronting unemployment and discrimination. This is one of the most serious social problems in Tibet today.

A comparison between Tibetan and other large ethnic minorities in China

The situation concerning education among the 14 major ethnic groups (with a population larger than two million in 2007) in China, according to data from two recent censuses, is presented in Table 9.8. There are great variations among these 14 groups. The Koreans are the most advanced in education with an illiteracy rate

of only 3.3 percent in 2000 while the Manchu and Mongols also ranked ahead of the Han. Tibetans are the least educated where illiteracy rates are concerned. The Tibetan population in this table includes all ethnic Tibetans throughout China.

Table 9.8. Educational Achievement* of 14 Ethnic Minority Groups (1990 and 2000)

1990 Population at age of six and above								
	Illiterate %	Primary school %	Junior middle School %	High school%	Vocational school %	University/ college %	Total%	Total pop (10,000)
Han	19.8	42.2	27.2	7.5	1.7	1.6	100.0	91,583.8
Zhuang	20.4	52.4	20.0	5.2	1.3	0.7	100.0	1,351.9
Manchu	11.4	44.1	32.0	8.4	2.2	1.9	100.0	847.9
Hui	32.1	33.8	23.2	7.2	1.9	1.8	100.0	742.3
Miao	39.9	42.7	13.1	2.9	1.0	0.5	100.0	632.0
Uygur	25.0	53.0	14.6	4.3	2.0	1.1	100.0	589.1
Yi	47.7	39.7	9.9	1.5	0.9	0.3	100.0	565.8
Tujian	23.0	48.8	20.6	5.2	1.6	0.8	100.0	499.3
Mongol	17.9	41.8	25.9	9.4	2.8	2.2	100.0	404.4
Tibetan	69.0	22.7	5.3	1.0	1.4	0.5	100.0	392.6
Dong	26.4	49.6	17.9	4.0	1.4	0.7	100.0	215.5
Buyi	40.4	42.9	13.2	1.9	1.2	0.4	100.0	220.1
Yao	28.9	51.0	14.3	4.1	1.2	0.6	100.0	181.3
Korean	8.2	26.0	37.6	19.6	3.8	4.8	100.0	172.3
Whole China	20.6	42.3	26.5	7.3	1.7	1.6	100.0	99,409.0
2000 Population at age of six and above								
Han	9.0	37.6	37.3	8.8	3.4	3.9	100.0	106,119.6
Zhuang	7.7	46.4	34.7	5.7	3.4	2.0	100.0	1,497.6
Manchu	5.1	37.5	40.4	8.5	3.6	4.8	100.0	994.1
Hui	18.3	36.8	29.0	8.3	3.5	4.1	100.0	893.0
Miao	20.5	50.9	21.5	3.3	2.3	1.4	100.0	797.3
Uygur	11.6	53.1	24.6	4.3	3.6	2.7	100.0	751.4
Yi	26.0	51.6	16.4	2.6	2.2	1.1	100.0	684.9
Tujian	11.2	47.6	29.9	5.7	3.3	2.3	100.0	729.4
Mongol	7.9	37.3	34.7	10.2	4.6	5.2	100.0	531.9
Tibetan	51.6	35.2	7.7	1.7	2.5	1.3	100.0	479.1
Dong	12.1	49.8	28.4	4.4	3.3	2.1	100.0	268.2
Buyi	22.8	50.7	20.3	2.4	2.5	1.3	100.0	262.1
Yao	10.7	52.3	27.7	4.6	2.8	1.9	100.0	242.4
Korean	3.3	20.4	43.1	19.8	4.9	8.6	100.0	185.9
Whole China	9.5	38.2	36.5	8.6	3.4	3.8	100.0	115,670.0

* Percentage of educational achievement: number of graduates for total population at age six and above.
Sources: Population Census Office of State Council 1993a: 722–732; 2002a: 563–567.

The illiteracy rate of Tibetans in the TAR was 66.7 percent in 1990, while the rate was 69 percent for all ethnic Tibetans in China. That means that Tibetans outside of the TAR have a slightly higher illiteracy rate. But in 2000, the illiteracy rate of Tibetans in the TAR was 56.4 percent vs. 51.6 percent for all Tibetans in China. That means education in Tibetan areas outside the TAR developed faster than in the TAR in the 10 years from 1990. Urban areas in the TAR have moved forward and schools in rural areas have been left behind in educational development.

Although Tibetans had the highest illiteracy rate among the 14 major ethnic groups, in other educational matters they were not at the bottom of the list. There were more Tibetans with a college education (1.3 percent) than Yi (1.1 percent). The percentage of those with a vocational-school education (2.5 percent) was higher than that of the Yi and Miao. Government efforts in recent years, in other words, have been largely concentrated on vocational schools and university/college education in the TAR.

Tibetan as the language of instruction in schools

The issue of using Tibetan as the language of instruction in schools is critical in analyzing educational development in the TAR. The *Summary of the Implementation of Regional Autonomy for the Ethnic Minorities in the People's Republic of China* (1952) stipulated that the "administration of ethnic minority autonomous areas can utilize their own spoken and written language to develop culture and education of minority groups (People's Press, 1954: 96)." Article 36 of the *Law of Regional Autonomy for Ethnic Minorities*, which was issued by the National People's Congress in 1983, stipulated that autonomous areas can, "based on the nation's education policy and regulations of laws, decide their own regional educational plans, systems for various schools, methods of teaching, language of instruction, and methods for student recruitment . . . [they] can develop the education opportunities for minority groups on their own . . . for schools that mainly recruit minority students, the textbooks are in minority languages and where possible . . . minority languages should be used as the teaching language; higher grades of primary schools or middle schools may have Putonghua courses."

Based on these policies and the suggestions raised by the 10th Panchen Lama and Hgapo Ngawang Jigme, the TAR government in 1987 decided that "both Tibetan and Putonghua were to be used in schools, but Tibetan should be used as the major teaching language (The Institute of Minority Educational Science of the TAR, 1989: 291)." In order to strengthen Tibetan language teaching there needed to be more and better-qualified Tibetan teachers. In 1988 about 66.7 percent of the 1,717 junior middle school teachers in the TAR were Han. The figure was 81.3 percent in

the high (senior middle) schools. The course assignment patterns of middle school teachers in the TAR in 1988 are shown in Table 9.9. Several observations can be noted here:

1. The largest two groups of junior middle schools were teachers of Chinese Putonghua courses (25.5 percent) and mathematics (24.5 percent). Teachers of Tibetan language made up only 7.5 percent of the total, following physics and chemistry.
2. Though there was a large proportion of Han teachers (61.8 percent) in junior middle schools, 34.8 percent of Putonghua language courses were actually taught by Tibetan teachers while many Han teachers taught mathematics, physics, chemistry, biology and geography. Han teachers are sent to the TAR for fixed periods of time (usually three years) and are selected primarily because they are experienced in specific subjects. Some local Tibetan teachers were less qualified to teach the natural and social sciences.
3. This division of labor is most obvious in high schools. About 40 percent of the Tibetan high-school teachers taught Tibetan language courses. Han teachers dominated in the natural sciences, social sciences and languages other than Tibetan.

Table 9.9. Teachers in Middle Schools in the TAR (1988)

Course	Junior Middle Schools		High Schools		Total	
	Han	Tibetan	Han	Tibetan	Han	Tibetan
Political science	49	17	25	4	74	21
Tibetan	0	97	0	32	0	129
Putonghua	214	114	61	9	275	123
Mathematics	183	132	60	8	243	140
Physics	91	36	45	6	136	42
Chemistry	83	16	45	2	128	18
Biology	27	1	22	1	49	2
Geography	29	7	18	5	47	12
History	30	13	28	2	58	15
English	48	5	27	0	75	5
Music	14	9	0	0	14	9
Sports	19	38	19	12	38	50
Arts	8	6	0	0	8	6
Total	795	491	350	81	1145	572

Source: The Institute of Minority Education Science of the TAR, 1989: 295.

Table 9.10 shows the situation concerning language teaching in the TAR schools in 1991. Of primary school students, 93 percent were taught in Tibetan with Putonghua taught as a second language; 20.3 percent of junior middle school students and 10.6 percent of high-school students, were also taught in Tibetan with these schools mainly in Lhasa and towns; students in the "three guarantees" schools were taught mainly in Tibetan. Because of the lack of Tibetan teachers, 88.5 percent and 95.5 percent of junior and high-school teachers in the "three guarantees" programs were Han, and some of them might not have been able to teach in Tibetan. Since we do not know whether the data in Table 9.9 included teachers of the "three guarantees" schools, it is impossible to make any comparisons between these two tables.

Table 9.10. Language of Instruction in Schools in the TAR (1991)

	Teaching Language	Students in school	%	Teachers	%
2652	Putonghua	11,475	6.8	1,698	20.2
Primary	Tibetan	156,587	93.2	6,710	79.8
Schools	Total	168,062	100.0	8,408	100.0
42 Junior	Putonghua	13,586	79.7	1,326	75.9
Middle	Tibetan	3,468	20.3	422	24.1
School	Total	17,054	100.0	1,748	100.0
19	Putonghua	4,245	89.4	580	97.3
High	Tibetan	503	10.6	16	2.7
School	Total	4,748	100.0	596	100.0
32 Junior	(Minorities)	8,382	100.0	107	11.5
middle School	(Han)	0	0.0	820	88.5
("three guarantees")	Total	8,382	100.0	927	100.0
7 high	(Minorities)	1,551	100.0	9	4.5
School	(Han)	0	0.0	193	95.5
("three guarantees")	Total	1,551	100.0	202	100.0

Source: Editorial Group of Chinese Educational Yearbook, 1993: 654.

According to Table 9.10, 79.8 percent of the primary school teachers used Tibetan as the language of instruction while 80.2 percent of junior middle school (including those in the "three guarantees" programs) teachers (including Tibetan teachers) used Putonghua as the teaching language. The teachers who used Putonghua comprised 96.9 percent of the total high-school teachers (including the "three guarantees" programs that provide Tibetan students with free dormitory accommodation, clothing and meals). Therefore, there was a very serious mismatch between primary schools that use Tibetan language to teach most courses and junior

middle schools that use Putonghua as the teaching language. In 1999, only 13 percent and 5.7 percent respectively of Tibetan students in junior middle schools and high schools received education in Tibetan in the TAR (Zhou Wei, 2003: 374).

The new middle school students came mainly from primary schools taught in Tibetan. Their knowledge of Putonghua was usually as rudimentary as that of second-year students in Han primary schools, thus they could not follow courses taught in Putonghua. This has been the major reason for the low scores of Tibetan students in middle schools.[15] At the primary school level, Tibetan is the dominant language of instruction. There are also some classes or departments in vocational schools and colleges/universities that are taught in the Tibetan language. But in general, Tibetan has not been used commonly as the teaching language in junior middle and high schools. Because of this gap in the middle stage of a student's education process, it still cannot be said that there has been a comprehensive educational system with Tibetan as the teaching language in the TAR (The Institute of Minority Educational Science of TAR, 1989: 293–294). "This dislocation between primary and secondary education lies at the center of the debate over Tibetan-medium education (Bass, 1998: 241)." A central challenge facing the educational system in the TAR is that the current system failed in either providing Tibetan students with sufficient Putonghua language capability to handle junior middle and high-school courses effectively or, alternatively, offering Tibetan language courses at those levels. It seems that the present efforts lead to the first alternative, which is to strengthen Putonghua courses for Tibetan students in primary schools.

At both ends of the educational spectrum (primary schools and colleges) programs taught in Tibetan have been established, but middle schools remain a weak link. It should be pointed out that apart from a lack of qualified Tibetan teachers, there has also been a shortage of textbooks written in Tibetan, especially for physics, mathematics, chemistry, biology and geography. Since 1982, a cooperative effort by the TAR and the other Tibetan autonomous areas in Gansu, Qinghai, Sichuan and Yunnan has produced, by the middle of the 1990s, 228 textbooks in various disciplines for primary, middle and high schools. This is a major step forward for Tibetan-language teaching.

Since 1998, work on Tibetan textbooks has been curtailed as an increasing number of schools have turned to Chinese textbooks. The number of translated Tibetan textbooks fell from 590 in 1998 to 226 in 1999, then to 63 in 2000 (Editorial Committee of the TAR Chronicles, 2005: 243). There is perpetual criticism about these textbooks because their content is simply translations of the Chinese textbooks issued by Ministry of Education of the central government. The content is not relevant to the history, traditional culture, ecological environment and daily life of minority people (Postiglione, 1999: 16–17), and they express the "unity" side but ignore the "pluralist" side of the "pluralist unity framework of the Chinese nation" and provide limited knowledge and skills to minority students to preserve

their traditional culture and to survive in the job market after graduation (Ma Rong, 2001: 250–253).

One significant policy change regarding the teaching language in schools took place in 2002. On August 13 the People's Congress of the TAR passed a "decision of amending 'the several regulations of learning, using and developing Tibetan language in the TAR'." The second clause of the 1987 regulations was changed to "Tibetan language is the common language in the TAR." The third clause was changed to "the TAR insists on the principle of language equality of all ethnic groups, and maintains the unification of the language system. The government at all levels should emphasize and strengthen the work of learning, using and developing the Tibetan language." This policy switch resulted in a transition in schools from "the mainly teaching in Tibetan model" to "the mainly teaching in Putonghua model."

Seven models in the TAR were summarized regarding the language of instruction in schools (Table 9.11). The transition process is clear that emphasis of Tibetan as a major teaching language in the late 1980s has gradually been transferred into the model with Putonghua as the major language of instruction. Urban schools and colleges moved one step ahead, followed by rural junior middle schools and primary schools. There are many debates on this transition, but the trend seems irreversible.

Table 9.11. Models of Language Course and Language in Instruction in the TAR Schools

Model	Period	School application	Tibetan language course	Putonghua language course	Other courses taught in Tibetan	Other courses taught in Putonghua
I	1988–1998	Majority of primary schools and some junior middle schools	All grades	From 3rd and 4th grade in primary school	All courses except *Putonghua*	none
II	90s	7 primary schools in Lhasa.	All grades	From 1st grade in primary school	none	All courses except Tibetan language
III	80s–90s	One fourth of junior middle schools	All grades	All grades	About half of courses	About half of courses
IV	70s–90s	Four year program in junior middle schools	All grades	The first year to strengthen Putonghua	None	All courses except Tibetan language
V	present	Most primary schools,	All grades	From 1st grade in primary school	Most courses	None
VI	present	Junior middle and high schools	All grades	From 1st grade in primary school	None	All courses except Tibetan language
VII	present	Vocational schools, college and universities	All grades	All grades	None	All courses except Tibetan language

Source: Zhang Tingfang, 2007: 16–17.

According to a 2007 report, about 95 percent of primary schools in the TAR follow Model V with most courses taught in Tibetan. Model VI has variations in reality. Among Tibetan students in junior middle schools, 13 percent (about 4,000 students) were exposed to Tibetan-teaching models (all courses taught in Tibetan accept Putonghua courses). Among Tibetan students in high schools, 5.7 percent (381 students) were exposed to Tibetan-teaching models (Research Group of the TAR Education Commission, 2007: 34). There is a clear trend in the traditional Tibetan-teaching model being shifted aside for the Putonghua-teaching model.

There were four universities and colleges in the TAR in 2008: Tibetan College of Minorities (established in 1965 in Xianyuang), Tibet University (established in 1985 in Lhasa; it used to be Tibet Normal College and was established in 1975), Tibetan College of Agricultural and Animal Husbandry (established in 1978 in Nying chi) and Tibet College of Tibetan Medicine (established in 1993 in Lhasa). There were 5,475 students (3,251 or 59.4 percent are minorities) and 813 faculties (351 or 43.2 percent are minorities) in colleges or universities in the TAR in 2000 (Editorial Committee of the TAR Chronicles, 2005: 173). Preferential admission policies have been applied in China for ethnic minorities since the 1950s (Sautman, 1999). The policy has also been applied in the TAR. For example, in 1980 the university/college admission mark for the humanities and social sciences was 95 for Tibetan students and 196 for Han students while that for the sciences was 160 for Tibetans and 230 for Han. In 2002 the admission mark for the humanities was raised to 273 for Tibetans and 340 for Han, and 235 for Tibetans and 340 for Han for the sciences (Wu Degang, 2005a: 249).

In the past several decades, a young generation of Tibetan professionals and scholars has emerged in the TAR. According to education statistics, there were 13 professors and 144 associate professors teaching in universities/colleges in the TAR in 2000. Among 13 professors, there were seven Tibetans and six Han. Among 144 associate professors, there were 48 Tibetans, 94 Han, 1 Manchu and 1 Mongolian (Editorial Committee of the TAR Chronicles, 2005: 283–290). In general, the development of higher education in the TAR was slow compared with other provinces and autonomous regions in China. Regarding the structure of faculties, only two percent of university/college faculties in the TAR offer doctoral degrees compared with 10.1 percent for the whole of China, and only 3.6 percent of university/college faculties in the TAR have full professors compared with 10.1 percent for the whole of China (Yang Xiaojun and Liu Kai, 2008: 196–197).

Information collected in the 1988 Survey

To date, the 1988 survey conducted by Peking University is still the only questionnaire survey providing detailed education information about rural and

urban residents in the TAR. For this reason, some discussions based on this survey will still be helpful in understanding the educational situation in the TAR in the late 1980s, the key period between the Cultural Revolution and the new reform period as well as the base for educational development during the 1990s and the new century.

Educational achievement of interviewed household members

The 1988 survey data on educational achievement and years of schooling of the respondents is presented in Table 9.11, broken down by rural and urban status. The respondents in the old urban areas of Lhasa were mainly native Tibetans. About 54 percent of them were illiterate in 1988. This percentage is higher than that in the 1990 census report (25 percent). Our respondents represented native Tibetans who had lower educational qualifications compared with the Han and Tibetan migrants in the unit households of the new urban areas of Lhasa. The census tallied the entire population of Lhasa, including peasants in the suburbs.

For the areas in which many children from peasant families left school long before graduation, the indicator of "years in school" might provide more detailed information. Lhasa residents seem to leave school most often after the third, fifth, or eighth years (Table 9.12). The first three years of schooling (known as "the junior primary school program") should allow students to read and write. They can continue their studies in order to graduate from primary school after five years (a five-year program is designed for Tibetan primary schools in the TAR). The next step would be graduation from junior middle school after eight years. Only 3.5 percent of our respondents in Lhasa completed nine years in school or more, lower than census results for the Urban District (11.8 percent). In rural areas, there were 738 persons who were either illiterate or failed to answer the question in our 1988 survey. About 67.3 percent of them stayed in school for less than five years and thereby failed to graduate from primary school. The situation has improved greatly in the past 22 years. The total graduates of primary school in the TAR increased from 7,467 in 1988 to 52,721 in 2008, and the graduates of middle school in the TAR increased from 6,081 to 55,922 during the same period, which means a growth of more than seven times (SBT, 2009: 255).

Language skills of interviewed respondents

Tibetans represented 98 percent of the total heads of households who were interviewed in Lhasa. Apart from Tibetans, other ethnic groups also spoke some Tibetan (Table 9.13). But only 14.1 percent of the Lhasa respondents could read Tibetan well and two-thirds could not read it at all. A good proportion of the interviewed household heads never had the opportunity to attend school because

Table 9.12. Educational Achievement and Years of Schooling of Interviewed Household Members at Age Six and Above (1988)

		Lhasa		Counties	
		Persons	%	Persons	%
Educational Achievement	Illiterate	1617	54.3	2585	73.6
	Primary school	834	28.0	847	24.1
	Junior middle school	388	13.0	59	1.7
	High school	67	2.3	10	0.3
	Vocational school	37	1.3	6	0.2
	University/college	34	1.1	3	0.1
	Total	2977	100.0	3510	100.0
Total years in School	0	1617	54.3	2585	73.6
	1	45	1.5	80	2.3
	2	82	2.8	129	3.7
	3	114	3.8	166	4.7
	4	77	2.6	122	3.5
	5	149	5.0	108	3.1
	6	81	2.7	32	0.9
	7	64	2.1	36	1.0
	8	106	3.6	30	0.9
	9	37	1.2	11	0.3
	10	16	0.5	11	0.3
	11	13	0.4	5	0.1
	12	14	0.5	4	0.1
	> 12	27	0.9	4	0.1
	Unknown	535	18.0	187	5.3
	Total	2977	100.0	3510	100.0
Household head	Year in school on average	1.09	-	0.86	-

there were very few schools when they were young. The illiteracy rate (54.3 percent) among them was, therefore, relatively high. Since Lhasa residents have more chances to communicate with Han, we found that 10.2 percent of them could speak Putonghua well and 20.3 percent could speak it to some degree. But only 2.7 percent could read Chinese characters well and 90 percent of them could not read at all. This is markedly different from the situation in the capital cities of the other autonomous regions in China.

Table 9.13. Language Capacity of Interviewed Household Heads (1988)

Language	Capacity in communication	Lhasa	Counties	Total	
		%	%	Household	%
Oral Tibetan	No knowledge	0.0	0.1	1	0.1
	Some capacity	1.1	0.8	12	0.9
	Excellent	98.9	99.1	1292	99.0
	Total	100.0	100.0	1312	100.0
Read and write in Tibetan	No knowledge	66.9	78.5	955	72.8
	Some capacity	19.0	14.0	216	16.5
	Excellent	14.1	7.5	141	10.7
	Total	100.0	100.0	1312	100.0
Oral Putonghua	No knowledge	69.5	90.4	1051	80.1
	Some capacity	20.3	9.1	192	14.6
	Excellent	10.2	0.5	69	5.3
	Total	100.0	100.0	1312	100.0
Read and write in Putonghua	No knowledge	90.2	97.5	1232	93.9
	Some capacity	7.1	2.0	59	4.5
	Excellent	2.7	0.5	21	1.6
	Total	100.0	100.0	1312	100.0
Main language used in public	Tibetan	100.0	99.7	1310	99.8
	Putonghua	0.0	0.3	2	0.2
Main language used at home	Tibetan	100.0	100.0	1312	100.0
	Putonghua	0.0	0.0	0	0.0
Ethnic composition of neighbors	All Tibetans	85.5	82.5	1102	84.0
	Majority Tibetans	12.2	16.7	1901	4.5
	Half and half	1.7	0.6	15	1.1
	Majority Han	0.6	0.2	5	0.

In contrast, 7.5 percent of rural household heads could read Tibetan well, while only 0.5 percent of them could read Chinese well. This made publications in any language inaccessible to these people. This is a major hurdle for rural Tibetans who want to improve their skills in cultivation, herding and handicrafts. Since the three prefectures (Lhasa, Shigatse and Lhoka) selected for our 1988 survey were highly populated areas with a relatively advanced economy for Tibet, it was surprising to see that there were 78.5 percent of respondents who could not read Tibetan.

Most respondents mentioned that they spoke Tibetan mainly in public places and at home. A large proportion of Lhasa residents in the old urban district reported

that they had very little daily contact with Han. Another group emphasized their preference for using Tibetan in public and in our interviews, although we observed that they actually could speak Putonghua fairly well and used it when they had to. I participated in the interviews of about 70 households in Lhasa and it was my impression that at least 30 percent of the respondents spoke Putonghua well and only about 10 percent could not speak it at all.

In contrast, 0.3 percent of rural respondents reported that they mainly spoke Putonghua in public although there were very few Han residents in the villages. These were artisans or traders who often dealt with Han customers.

The majority of residents in the old urban area of Lhasa are Tibetans and some 85.5 percent of them reported having no Han neighbors. A similar residential pattern was found among rural respondents. The percentages of those having Han neighbors in rural areas were slightly higher than in Lhasa because the category "neighbor" covered a wider area in rural Tibet. In general, residential patterns in the TAR had limited the daily contact between Han and Tibetan residents.

Tibetans often noted the need to learn Putonghua but Han cadres, workers and students rarely felt the need to learn Tibetan. To some extent this was because many of the Han were in Tibet for just three to five years so there was little incentive for them to learn a new language that they would not use after they left. Table 9.12 shows that about 70 percent and 90 percent of urban and rural Tibetans could not speak Putonghua. So with the Han being unable to speak Tibetan and most Tibetans being unable to speak Putonghua, the contacts between them were limited.

Although all Tibetan respondents underscored that they spoke Tibetan in public, 73.8 percent of them reported that they had contact with Han often in their daily lives and 79.2 percent of them expressed a need to learn Putonghua (Table 9.14). About 79 percent of them believed that it was necessary to learn Putonghua to promote the future social and economic development of Tibet. As much as 93.8 percent of household heads wished their children could speak both Tibetan and Putonghua. Meanwhile, most of the rural respondents (73.2 percent) had limited contact with Han, but 85.9 percent of them felt the need to learn Putonghua. This percentage was even higher than for their urban contemporaries (79 percent). In Tibet there is nevertheless a widespread sense among many Tibetans that schools should strengthen the use of Tibetan as the medium of instruction to preserve and develop Tibetan traditional culture. At the same time, many Tibetans also recognize that being fluent in Putonghua will provide Tibetan students more opportunities in their job searches and future career, so they can land jobs within government institutions in the TAR or outside the TAR such as in Beijing and coastal cities.

Table 9.14. Opinion of Interviewed Household Heads on Learning Tibetan and Putonghua

		Lhasa		**Counties**		**Total**	
		Households	%	Households	%	Households	%
Do you communicate often with Han?	Quite often	288	73.8	52	26.8	340	58.2
	Not often	102	26.2	142	73.2	244	41.8
	Total	390	100.0	194	100.0	584	100.0
Do you feel the need to learn standard Putonghua?	Yes	403	79.2	488	85.9	891	82.7
	No	106	20.8	80	14.1	186	17.3
	Total	509	100.0	568	100.0	1077	100.0
Do you feel the need to promote learning Putonghua for Tibet development	Yes	381	79.0	547	94.3	928	87.4
	No	101	21.0	33	5.7	134	12.6
	Total	482	100.0	580	100.0	1062	100.0
Your evaluation of Tibetan language teaching in primary and middle schools	Excellent	149	36.3	179	32.2	328	33.9
	Moderate	206	50.1	300	54.0	506	52.3
	Acceptable	43	10.5	58	10.4	101	10.4
	Poor	13	3.1	19	3.4	32	3.4
	Total	411	100.0	556	100.0	967	100.0
Your evaluation of standard Putonghua teaching in primary and middle schools	Excellent	125	30.4	158	30.0	283	30.1
	Moderate	177	43.1	281	53.3	458	48.8
	Acceptable	89	21.6	49	9.3	138	14.7
	Poor	20	4.9	39	7.4	59	6.4
	Total	411	100.0	527	100.0	938	100.0
Wish for your children in their language learning	Mainly Tibetan	8	1.6	67	12.5	75	7.1
	Mainly Putonghua	24	4.6	23	4.3	47	4.5
	Both	487	93.8	446	83.2	933	88.4
	Total	519	100.0	536	100.0	1055	100.0

Among rural respondents, 83.2 percent wished their children could speak both Tibetan and Putonghua. This number was lower than in Lhasa (93.8 percent). It is clear that an overwhelming majority recognized the need for both Putonghua and Tibetan.

Dr. Zhou Wei conducted a language-use survey in the TAR in 1999. The total interviewed households were 189, 138 from urban Lhasa and 51 from villages in two counties (Medro Gongkar and Lhundup). The result of this survey is presented in Table 9.15. Another survey conducted in urban Lhasa has similar results (Lei Yongsheng, et al, 2007).

Table 9.15. Language Use of Rural and Urban Tibetan Respondents (1999)

Occasions	Language use							
	Tibetan		Putonghua		Bilingual		Total	
In public	Number	%	Number	%	Number	%	Number	%
Work place	34	25	24	17	80	58	138	100
School	27	20	26	19	85	61	138	100
Shop	19	14	28	20	91	66	138	100
Tea house	78	56	5	4	55	40	138	100
Street shopping	22	16	26	19	90	65	138	100
Hospital	19	14	30	22	89	64	138	100
Meeting	30	22	47	34	61	44	138	100
Friends	72	52	5	4	61	44	138	100
In household								
In whole family	89	65	2	1	47	34	138	100
Between children	72	52	2	1	64	47	138	100
Meals	95	69	1	1	42	30	138	100
Entertainment	70	51	4	2	64	47	138	100
Between couple	93	67	1	1	44	32	138	100
Chat	78	57	3	2	57	41	138	100
House work	98	71	2	1	38	28	138	100
Play with children	67	49	1	1	70	51	138	100
In media								
TV programs	31	22	23	17	84	61	138	100
Radio	41	29	16	12	81	59	138	100
Newspapers	38	27	30	22	70	51	138	100
Books	43	31	21	15	74	54	138	100
Movies	37	27	24	17	77	56	138	100

Sources: Zhou Wei, 2003: 128–138; 233–239.

It is clear that bilingualism prevails in public and cultural life and is also very significant in Tibetans' family life. Many Putonghua words related to political terms, modern electronic equipment and domestic items are popular in Tibetans' daily life because they are introduced into Tibet from Han regions, so Tibetan residents pick up the Putonghua and Tibetan words accordingly. Very few Tibetans speak only Putonghua within their households and among fellow Tibetans (between friends and in tea houses). Tibetans speak Putonghua more often at official meetings and in hospitals and shops.

Factors affecting children who attend school

The correlation coefficients between two education indicators (graduation level and years in school) and other variables based on our 1988 survey data are calculated to identify the important factors in school attendance (Table 9.16).[16]

Table 9.16. Correlation between Education and Other Variables

		Gender	Age	Place of birth	Registration	religion	Income per capita	Consum. per capita
Lhasa	Education achiev.	-.2717**	-.3542**	-.1766**	-.0480	.1816**	.1516**	.1171*
	Year in school	-.2647**	-.3806**	-.2264**	-.0455	.1613**	.1306*	.0891
Counties	Education achiev.	-.1787**	-.2666**	-.0540	-.0764	.0169	.0869	.0869
	Year in school	-.1022**	-.2681**	-.0973	-.1491**	-.0250	.1276*	.1143*

Significant level: * < .01; ** < .001.

Several points can be summarized: (a) Age is the most important variable for education. Younger students have received more education because schooling has developed rapidly in the past four decades. It is more obvious in Lhasa than in the rural areas. (b) Gender is the second most important factor. Males receive more education than females. The difference between males and females is most obvious in Lhasa. (c) Migrants have more education than natives in Lhasa. (d) Residential registration has no effect in Lhasa but has some impact in the rural areas. "Non-agricultural" residents in villages usually spend more years in school while "pastoral" residents receive the least education. (e) Religious variables don't affect the rural areas, where most people are Buddhist. Lhasa residents without religious beliefs had more education. (f) Income and consumption for adults are a consequence of their achievements in education, not a pre-condition for their education. Lhasa residents who have more education and rural residents who spent more years in school had higher incomes overall.

Correlation analysis measures the linear relation between two variables while multi-regression analysis measures the linear relations between one dependent variable and a group of independent variables. The factors affecting education can be analyzed in following two regression equations.

Lhasa (Year in school) = 6.5–0.293 (Place of birth) –1.200 (Gender) –0.005 (Age)
($R^2 = 0.2097$; $F = 46.08$; Sig $F = 0.0000$)

Rural (Year in school) = 6.12–0.316 (Place of birth) –0.485 (Gender) –0.038 (Age) –1.224 (Registration).
($R^2 = 0.1169$; $F = 17.77$; Sig $F = 0.0000$)

For Lhasa residents, the most important variable in regression is gender. There was a 1.2-year difference between male and female household heads on average. The place of birth is the second significant variable. Native-born Lhasa residents received more education than migrants. Age is the third factor. On average, younger people received slightly higher education than older people; about an 18-year age difference would result in one additional year of education.

For rural residents, the first important factor is "registration." "Non-agricultural" residents who were largely local cadres spent more years in school — about 1.2 years longer than peasants did and 2.4 years longer than herdsmen did. The second factor is "gender"; male household heads spend 0.5 more years in school compared with their female counterparts. The third factor is place of birth. Those who were born within the same county where they currently reside received more education than migrants. This variable lost statistical meaning in correlation analysis but became significant in regression. The fourth factor is age as younger people received more education. The constant of the regressions is 6.12 (years) for rural respondents and 6.54 (years) for Lhasa respondents. When all information for each respondent is put into the equation, the final result is his/her years in school.

In general, gender, age, place of birth and registration are the factors affecting a person's education, especially for household heads above 40 years old in the late 1980s.

Issues for Future Educational Development in the TAR

Monastic Education after 1952

Decline of monastic education from 1952 to 1984

From 1952 to1959 Tibet was under two parallel influences: one was the indigenous traditional religious culture and social norms and the other was the political and economic impact initiated by the central government of China. Education was one of the fields both sides wanted to control and influence. Monastic education had survived in Tibet for centuries and monasteries were strongly against any reform of the extant educational system; they saw modern schools as a threat to their traditional monopoly on education and knowledge. On the other hand, the central government was committed to promoting modern school education in Tibet.

Modern schools would establish a public educational system beyond the control of the monasteries and potentially challenge the religious domination and estate-serf system. In short, the establishment and development of a modern school system would weaken the foundations of the theocratic government and society. On the other hand, the strengthening of monastic education would permit Tibetan Buddhism to maintain its strong influence on the Tibetan people as well as maintain the traditional political, economic and social order. That is why the *Kashag* government strongly opposed any new schools in Lhasa and why the central government so enthusiastically promoted new schools during this period.

After the 1959 land reform, monasteries lost all their serfs and land and much of their political power. The number of monks rapidly declined, and monasteries lost their stranglehold over education. During those years parents seldom sent their children to monasteries to become monks. Modern schools then developed very quickly and the new generations who graduated from these new schools became the cadres and intellectuals of the TAR.

Monastic education after 1984

Following the return to power of Deng Xiaoping in 1978, some monasteries destroyed during the Cultural Revolution were rebuilt with government grants and contributions from Tibetans. Religious activity was revived and peasants and herdsmen began, once again, to send their children to monasteries to become monks. The number of monks in the TAR increased from 800 in 1976 to 41,800 in 1994 (Lin Junhua, 1995: 17).

Religious education re-emerged in 1984. In that year major monasteries began to establish scripture-reading classes and senior monks began to train young monks. The government permitted these religious activities, including scripture classes in monasteries, traditional rituals by season, establishing a quota for the number of monks each monastery would be permitted while providing financial subsidies for the monks and monasteries. Other monks, volunteers who were outside the quota limitations, had to rely on the donations of pilgrims. Because religious learning had been banned in monasteries for about 18 years (1966–1984), there was a serious shortage of senior monks who were capable of teaching.

The future of monastic education

Monastic education started to decline in the 1930s. The regulations and disciplines of religious learning gradually became formulaic, without content. In 1929 the 13th Dalai Lama discovered that the list of candidates recommended by three major monasteries for *Larenpo Geshe* degree was based on bribes to the chief lamas of the three monasteries. He chaired the examinations himself and rejected unqualified candidates. The chief lamas of these monasteries were seriously punished (Zhu Jielin, 1990: 262).

The change of monastic education in Tibet was inevitable in its process of modernization and development. Tibet could not be isolated from the world forever. This regime with characteristics of the European Middle Ages remained very conservative when much of the world was embarking on some form of modernization. The *Kashag* government would eventually have fallen, much as the Manchu Qing Dynasty did in 1911. Traditional monastic education would have

followed the same path as the *Si-shu* system of traditional Confucianism in China when, inevitably, modern schools would have been introduced into Tibet.

One phenomenon is noteworthy. Traditionally, three-seat monasteries (Drepung, Sera and Ganden) were "mother monasteries" of many "son monasteries" in all regions where people believed in Tibetan Buddhism. For example, according to the survey in 1959, Drepung had 3,417 "son monasteries" (1,000 in Mongolia, 947 in Inner Mongolia, 640 in the TAR, 471 in Sichuan, 216 in Qinghai, 91 in Gansu, 33 in Xinjiang, 23 in Liaoning, 13 in Russia, eight in Ningxia, four in India, three in Yunnan and one in Bhutan with a total of 24,536 monks and 766 nuns) and these "son monasteries" sent their senior monks to study in Drepung. It had been the religious schooling system for centuries. But under the residential-registration regulations after 1959, the seat monasteries now mainly recruit new monks from counties under Lhasa City administration. For example, the Drepung records show that in 2000 79.6 percent of the total registered 700 monks came from the Lhasa area. Its 2005 records show 78.3 percent of its registered 563 monks came from the Lhasa area (37.8 percent from a single county Tolun Dechen) (Tanzen Lhundup, 2009). This trend "localized" the seat monasteries, which largely lost their traditional function and influence in Buddhist education.

Tibetan-language teaching and the study of modern knowledge

Teachers from the Han regions and training programs for Tibetan teachers

From 1960 to 1966 more than 600 graduates of normal colleges in the Han regions were sent to the TAR to work in local schools. In 1974, 389 teachers were sent (Dreyer, 1976: 251). From 1979 to 1987, 2,969 experienced teachers and more than 1,000 new graduates of normal colleges in the Han regions were assigned to the TAR.

In addition, in 1976 there were 439 Tibetan teachers trained in 10 normal colleges in the Han regions. From 1979 to 1983 the Chinese Ministry of Education arranged for 1,400 Tibetan students to be recruited as students for normal colleges in five provinces (Tanzen and Zhang Xiangming, 1991b: 332–333). In 1987 the second Tibet Work Conference passed a document, "Implementation Plan for Han Regions to help the TAR in Educational Development," which asked normal colleges in five provinces to train middle school teachers for the TAR. It also asked seven provinces and municipalities to provide necessary middle school teachers to seven prefectures in the TAR (Dorji Tseden, 1991: 103). All of these efforts were made in conjunction with the establishment of many new schools and improved the quality of teaching.

Textbooks in the Tibetan language

Some middle schools have tried to teach science courses in Tibetan but their efforts have been hindered by the unavailability and low quality of existing Tibetan textbooks. In 1960 a translation-editing group was formed to create Tibetan textbooks. Within three years this group produced a first version of Tibetan textbooks for Tibetan- and Chinese-language studies, mathematics, nature and geography for primary schools. However they were of poor quality. In the years 1972 to 1979 all the textbooks used in Tibetan primary school were simply the translations of primary school textbooks used in the Beijing Municipality. In the 1980s the entire set of textbooks in Tibetan were re-edited for primary, middle and high schools.

In order to promote cooperation between the TAR, Qinghai, Gansu, Sichuan and Yunnan in the development of Tibetan-language textbooks, a five-province/region cooperative group was established in 1985. In 1991 this group completed the translation and editing of Tibetan textbooks for all courses taught at primary and junior middle schools. Their high-school textbooks took a little longer to complete (Tanzen and Zhang Xiangming, 1991b: 336–339). As a result, for the first time, the TAR and all the other Tibetan-inhabited areas now have complete sets of all the required textbooks in the Tibetan language.

Bilingual teaching

During the Cultural Revolution, Tibetan as the language of instruction stopped being used in the TAR. This policy was criticized in the1980s after Deng Xiaoping had regained power and Tibetan-language instruction was resumed. During the late 1980s and early 1990s there was a trend toward curtailing the use of Putonghua as the language of instruction in TAR schools.

Some minority elites still have a negative attitude toward using Putonghua as a teaching language in schools. Putonghua is the language used not only by the Han (92 percent of the total population of China), but also by many other ethnic groups. Of the 55 ethnic minority groups, more than 50 percent of the 25 groups' populations speak Putonghua (Liu Yuanchao, 199: 276). The majority of the elite of all the ethnic minority groups speak Putonghua. So Putonghua is spoken and used beyond the Han as the common language for inter-group communication. Most historical classics and scientific findings are published in Chinese Putonghua, and foreign literature and scientific works are translated into Putonghua first; even most works of intellectuals of the ethnic minority groups are written in Chinese Putonghua. Without Putonghua knowledge, there is no access to a considerable amount of information resources and an inability to have meaningful social mobility.

Consequently, "when looking at the actual situation of each ethnic group, choosing Putonghua as the main language of instruction or bilingual teaching

are the only practical options and can only benefit the group . . . The cultural and economic prosperity of ethnic minorities in the process of modernization is closely associated with their capacity to use the Putonghua language . . . Education in Putonghua and education in a minority language should not be mutually exclusive, they should complement and support each other . . . The government should give equal emphasis to both (Xie Qihuang and Sun Ruoqiong, 1991: 114)."

In the "Summary of the Educational Work Conference in the TAR (1984)," the TAR government decided that "Tibetan should be the major language of instruction in education. Tibetan will be used in all primary schools. Putonghua language courses will be added in middle schools. All schools in the TAR should follow this policy (Dorji Tseden, 1991: 144)." In subsequent years Chinese Putonghua as the language of instruction was ended in all primary schools in the TAR except for several primary schools in Lhasa whose students were children of Han government employees.

Some Tibetans, especially those who live in Lhasa and the towns, feel that knowledge of Chinese Putonghua is useful for their children's career and employment opportunities. Some parents continue to request that Putonghua-language instruction be restored in primary schools. Article 20 of the "Instructions to Implement the *Compulsory Education Law of the People's Republic of China in the TAR* (1994)" directs that "the TAR should gradually develop a Tibetan-Putonghua bilingual teaching system with Tibetan as the major teaching language. The schools must guarantee that minority students first learn their native language well and, at the same time, study some Chinese Putonghua. In places where Chinese Putonghua is commonly used, schools should promote the use of standard Chinese Putonghua (*Tibetan Education*, 1994, Vol. 3: 3)." This policy encourages the setting up of Putonghua-language classes to teach it as a second language in primary schools.

The experience of teachers in many of the ethnic minority regions have established that using the native language as the language of instruction has been extremely helpful in reducing illiteracy and in allowing students to succeed in acquiring knowledge. At the same time, Chinese Putonghua language classes have proved to be very helpful for student's long-term academic and vocational careers. Both should be emphasized and a balance maintained according to actual situations and needs in each region.

School segregation

There are separate schools for different ethnic groups in all the minority regions throughout China. The purpose of establishing these schools is to teach minority students their own language and their cultures and histories. Different textbooks are used with their content adjusted to the specific minority community. These schools can adjust their teaching methods to the situations of the communities in which they are based and allow students the opportunity to be more comfortable among their own people.

Nevertheless, the segregation of schools by language/ethnicity can also have negative consequences. First, the quality of the curriculum and the speed of its implementation may fall behind those of the schools in the Han areas. This makes it more difficult for these students to compete with Han students or minority students who have studied in Han schools. Second, while these single ethnic schools help new students to adjust quickly, they also isolate these students from the larger society of which they are a part.

Around the end of civil war in 1950, large expanses in northwestern and southwestern China came under the control of the PLA in a short time. The government of the new People's Republic needed to establish local administrations quickly to replace the existing Kuomintang bureaucracy. This task led to the establishment of several schools and colleges to train minority cadres who were selected from the local slaves, serfs and poor people of the region. These institutions played significant roles at the time but the quality of education and the requirements for admission even then was lower than in similar Han institutions.

Gradually these schools become the educational avenues for ethnic minority students. They first entered minority primary schools, then minority junior middle schools and high schools, then minority colleges and finally they were sent to the minority areas as cadres, teachers and intellectuals, after graduation. They were seldom able to enroll in China's premier institutions such as Peking University or other top universities in China. Owing to this disparity, minority students are excluded from many technological and scientific fields. The upgrading of these minority colleges should be at the top of any future academic agenda

In the TAR ethnic school segregation became part of the system in the late 1980s. In 1988, in order to secure Tibetan as the language of instruction, the TAR government issued a document requiring that "all new students in primary schools in 1987 must be divided into separate Tibetan and Han classes or schools, and taught different curriculums (Zhou Wei and Kelzang Gyaltsen, 2004: 54)." Then schools were re-organized and classes for new students were also re-organized, according to ethnic status. Han classes were to be taught in Chinese Putonghua, with the study of Tibetan beginning in the senior grades, and Tibetan classes were to be taught in Tibetan, with the study of Chinese Putonghua beginning in the fourth year. Tibetan-language classes were compulsory in Han schools.

During our 1988 survey in Lhasa we visited several schools. Of a total of 17 primary schools we found only two that recruited both Tibetan and Han students. The rest either recruited only Tibetan students or only Han and Hui students. The breakdown by grades in these two schools is illustrated in Table 9.17.

The Experimental Primary School established Tibetan classes in 1987. Tibetan students in grades three to five studied in Chinese Putonghua. Han and Tibetan students have been separated since 1987. The Second Primary School did not recruit any students for its Han class in 1987. In its Han class of 1988 there were 11 Tibetan

Table 9.17. Class Divisions in Two Primary Schools in Lhasa Urban District (1988)

Grade	Experimental Primary School						City Second Primary School					
	Tibetan Class			Han Class			Tibetan Class			Han Class		
	#	Tibetan	Han	#	Tibetan	Han	#	Tibetan	Han	#	Tibetan	Han
First	2	81	0	1	0	64	3	155	0	1	11	42
Second	1	51	0	2	0	84	2	122	0	0	0	0
Third	0	0	0	3	68	83	1	65	0	2	38	46
Fourth	0	0	0	2	43	52	2	85	0	2	35	39
Fifth	0	0	0	4	96	90	2	72	0	2	36	36
Teachers	-	16	-	-	-	37	-	24	-	-	-	25

students. The principal of this school explained to me that the parents of these Tibetan students strongly insisted on having their children in the Putonghua class. The percentage of Tibetan students in the Han class (11) comprised 6.6 percent of the total number of Tibetan students (166) that year. Some Tibetan parents sent their children to Han schools in Chengdu (Sichuan) as well because, officially, their children could only be recruited into Tibetan schools or Tibetan classes. During the 1980s and 1990s, a large proportion of Tibetan cadres and intellectuals believed that their children could learn more in Han schools and have greater career opportunities as a result. Now they send their children to "inner class/school" for Tibetan students in coastal areas.

Improvements in the quality of education

The quality of education in the TAR has long been a problem. Under an affirmative-action system, in 1983 Han students required a score of 200 while Tibetan students needed only 100 points. Some Tibetan students were even allowed to enroll with scores as low as 60 (Lai Cunli, 1986: 45). From 1986 to 1991, the required score for college entrance was 200 for minority students in the TAR compared with 400 in other provinces. In 1985 the TAR selected 100 Tibetan primary school graduates for Tianjin Hongguang Middle School to be part of the "Tibetan Middle School Program." Hongguang Middle School organized an examination for these Tibetan students according to the third-grade primary school exam level in Tianjin. Among 100 students, only three passed the Putonghua exam with an average score of 22.5 points; only five passed the mathematics exam with an average score of 31.7 points (Tsewang Junme, 2007: 5). Tibetans received special support beyond that accorded other minority students. In 1989, of the 36 new Tibetan students who aspired to major in mathematics in college, the highest score on the mathematics exam was 51 (out of a possible 100), and the lowest was 12 with an average of 26.2 (Da Losang Namgyal and Fang Lingmin, 1992: 62). Nationwide the passing score was 60. These figures indicate the severity of the problem concerning educational quality in the TAR.

Table 9.18 illustrates the exam scores of graduates in Lhasa in 1989. In the graduation exams for primary schools, 35 percent achieved a passing grade in Han classes while only one percent of Tibetan classes passed. In the general exam for freshmen in junior middle school 39.6 percent of students in Han classes passed while only 4.3 percent passed the high-school entrance exams. As low as those numbers are, the rates for Tibetans were far lower.

One issue needs special attention: the size of the schools. Only after reaching a certain size (which is gauged by the total number of students and teachers) can a school provide an adequate environment. Schools in the TAR used to be small. In 1984 a middle school had 337 students while a primary school had only 68 students, on average. "If the high school parts of major middle schools were excluded, a county junior middle school would have only 20 students on average. If the town primary schools were excluded, rural primary schools would have fewer than 20 students (Lai Cunli, 1986: 45)." For schools with so few pupils and teachers, the curriculum and the teaching possibilities are severely limited.

Table 9.18. Exam Scores of Graduates in Lhasa City (1989)

Types	Han Class (Putonghua)		Tibetan Class	
	Average score	Rate of Pass (%)	Average score	Rate of Pass (%)
Exams for p In 1983, primary school graduation	47.1	35.0	23.1	1.0
Exam for new students in junior middle school	50.9	39.6	22.5	0.0
Exam for high school enrollment	20.6	4.3	9.2	0.0
Exam for new students in high school	25.7	3.9	9.5	0.0

Source: Da Losang Namgyal and Fang Lingmin, 1992: 62.

Development of education for professional training

Professional training programs will help students obtain the necessary and required knowledge and skills for jobs after graduation. Because secondary and tertiary industries were less developed in the TAR, skilled laborers are badly needed. On the other hand, colleges and universities are only able to recruit a small proportion of high-school graduates. Other graduates actually do not have any specific skills to bring to the job market. This is why the TAR has tried to develop vocational schools. In 1998 there were 16 vocational schools with a total of 5,579 students and 1,320 teachers/staff. They offered training in such diverse fields as accounting, finance and engineering.

By contrast, higher education in the TAR places greater emphasis on the humanities than it does in other provinces. Out of a total 782 teachers in colleges and universities in 1995, 45.5 percent were engaged in teaching humanities (Tibetan literature, Chinese literature, history and philosophy), 19.3 percent in teaching

sciences, 11.1 percent medicine, 10.4 percent agriculture, 2.8 percent finance and economics, 7.0 percent education, and only 2.2 percent engineering. This is now changing. The distribution of teachers by discipline in 1995 and 2006 shown in Table 9.19 indicates that the percentage of teachers in literature declined significantly while that in education, economics and agriculture increased. However, scientists and medical scientists also declined significantly.

Table 9.19. Subject Distribution and Academic Background of Teachers in Colleges and Universities in the TAR

Teaching field	1995		2006		Degree of background	1995		2006	
	#	%	Num.	%		Num.	%	Num.	%
Philosophy	34	4.3	67	4.0	Doctor degree	0	0.0	58	3.5
Economics	22	2.8	35	2.1	Master degree	12	1.5	280	16.7
Law	13	1.7	89	5.3	Graduate student	3	0.4	-	-
Education	55	7.0	242	14.5	Bachelor degree	454	58.1	1188	71.0
Literature	276	35.3	368	22.0	Undergraduate student	123	15.7	-	-
History	46	5.9	37	2.2	2 years' college	136	17.4	147	8.8
Sciences	151	19.3	143	8.5	Studied in college	54	6.9	-	-
Engineering	17	2.2	167	10.0					
Agriculture	81	10.4	174	10.4					
Medical science	87	11.1	154	9.2					
Management	-	-	196	11.7					
Total	782	100.0	1673	100.0	Total	782	100.0	1673	100.0

Sources: SBT, 1996: 309; 2007: 265.

The figures demonstrate a heavy bias toward the humanities when there is not a high demand in the job market for literature and philosophy graduates. Many occupations with high demands in the labor market are not being serviced by Tibetan universities. For example, among a total 3,492 engineers in the TAR in 1985, only 25.9 percent were Tibetans (Xu, Zhengyu, 1992: 21). The same is true of many other technical and scientific fields.

Table 9.19 also cites the educational achievements of the college/university faculty. There were no university teachers in the TAR with a doctoral degree in 1995. Among the 16 full professors in 1995, none had received a bachelor degree. The situation improved greatly in 2006 when of a total of 67 full professors, 11 had doctoral degrees, seven had master degrees and 36 had bachelor degrees (SBT, 2007: 265). The gap between the universities/colleges faculty in Tibet and their counterparts in other parts of China remains very large.

Tibetan schools/classes in the Han regions

The first Tibetan classes in the Han regions can be traced back to the period of the Guangxu Emperor of the Qing Dynasty. The Capital Manchu-Mongolian Academy in Beijing established its first Tibetan class in 1908. This class had three programs: a preparatory class (two years), a normal class (three years), and an alternative class (three years). The *Ambans* in Lhasa were responsible for recommending Tibetan candidates. Full tuition and living expenses were provided by the Qing government. During the period of the Republic of China (1911–1949), a Mongol-Tibetan School was established in the 1920s to recruit Mongol and Tibetan students. The Nanjing Mongol-Tibetan School was established in 1933 with the support of the ninth Panchen Lama and it recruited Tibetan students in Qinghai and western Sichuan.

A Tibetan Public School was established in Xian-yang (Shaanxi Province) in 1957. It changed its name to the Tibetan Nationality College in 1965. A total of 11,292 Tibetan students graduated from this college in the next 30 years. Presumably none was recruited between 1965 and 1978 during the Cultural Revolution. Since the establishment of the PRC, the Central College of Minority Nationalities in Beijing, the Southwestern College of Minority Nationalities in Chengdu (Sichuan Province), the Qinghai College of Minority Nationalities in Xining, the Northwesten College of Minority Nationalities in Lanzhou (Gansu) and the Yunnan College of Minority Nationalities in Kunming have also recruited many Tibetan students. For example, in 1956 the TAR sent 500 Tibetan students to Beijing and Chengdu to study (Ginsburgs and Mathos, 1964: 94). A large proportion of Tibetan cadres, teachers, doctors, and intellectuals now working in the TAR and other Tibetan areas graduated from these colleges.

In 1984 the central government decided to establish three Tibetan middle schools in Beijing, Tianjin, and Chengdu, in addition to the creation of Tibetan-language classes in the best middle schools in 16 provinces. These programs recruit about 1,300 Tibetan students each year. Tibetan-language classes are mandatory. Since 1987 these programs have recruited mainly students from the rural areas in the TAR. In 1989 a total of 5,250 Tibetan students were studying in 108 Tibetan classes in the Han regions (Tanzen and Zhang Xiangming, 1991b: 317). In 1993 there were 11,000 Tibetan students studying in 75 schools in 25 provinces. The annual recruited new students in these Han regions numbered 1,160 to 1,755 from 1985 to 2001, and their total number was more than 23,560 during this period (Zhu Zhiyong, 2007: 73). The total number of recruited Tibetan students was about 33,100 in 2007 and about 14,000 graduates have returned to work in the TAR.

The students in these programs tended to get better scores in their exams than their counterparts still in the TAR. About 96 percent of 1,300 junior middle school graduates have enrolled in high schools since 1989. From 1992 to 1994 about 2,000 Tibetan students who graduated from vocational schools in the Han regions

returned to the TAR to work. In 1992 a total of 279 high school graduates from these programs attended colleges or universities. Compared with the college entrance exam results of Tibetan students who studied in the TAR, the scores for these Tibetan students was 164 points higher in the humanities and social sciences and 141 points higher in the sciences (Zhang Husheng, 1993: 41). The present policy is to arrange for all Tibetan students in "Inner School (Neidi)" to return and work in the TAR after their graduation from universities or vocational schools. Interviews with these students showed that most of them wanted to return (Postiglione, Ben Jiao, and Ngawang Tsering, 2009). But from the viewpoint of ethnic integration, some of these Tibetan students who remain and work in Han regions might become a positive link between Han and Tibetans.

But there are also complaints about the recruitment of the "Inner School." First, since 1995, 10 percent of the quota were assigned to "the children of Han (and other groups) cadres who worked in the TAR for 10 years or longer at county level, or 20 years or longer at prefectural level or in Lhasa (Editorial Committee of the TAR Chronicles, ed., 2005: 351)." This policy is designed to encourage Han cadres to work in the TAR for a longer period of time. But some Tibetans think this program should benefit ethnic Tibetans only and complained that these Han students who were unable to attend the best universities elsewhere in China took their chances in the TAR. Second, some Tibetan farmers complained that Tibetan cadres have the privilege to send their children to "Inner School" and this program was designed for rural children. Similar complaints were also found in Xinjiang, and the Xinjiang government set specific regulations to control "backdoor" recruitments.

Conclusion

Education in Tibet has experienced great changes since 1952. A Middle Ages-style monastic education system has been transformed into a modern school system. The monastic education system was essentially destroyed after 1959. The new school system was established from 1959 to 1966 but it was interrupted during the Cultural Revolution. The schools were rebuilt when the political riots ended in 1976. After concerted efforts in the last quarter-century a complete educational system from primary schools to universities has been established in the TAR. Tibetan graduates have become the new generation of peasants, workers, teachers, engineers, cadres and employees of all social sectors of Tibetan society today. They have changed the educational makeup of the Tibetan population and supported the social, economic and cultural development during these past five decades. As a result of their efforts, an isolated, religiously dominated feudal serfdom has been converted into a society that is making progress toward modernization.

Because modern education in Tibet is still relatively new the quality of the teaching is still lower than that in other regions of China. In 2000 the illiteracy rate was still high (52.9 percent), the primary school enrollment rate was still low (88.3 percent) and the rate of students who quit primary school before graduation was high (74.6 percent in 1990). There are nevertheless important signs of educational progress. There are many issues regarding the education development in Tibet that need to be studied. The issues include: how to improve bilingual teaching; how to solve the problem of the language gap between primary schools where Tibetan is the language of instruction and secondary schools where Putonghua is the main teaching language; how to guarantee Tibetan as the language in instruction while reducing the negative impact of school segregation by ethnic status; how to edit the textbooks and ensure their content meets the need of native Tibetans; how to improve the rural-urban gap in education; and how to provide some useful skills for Tibetan students to help them to find a job in the labor market. The progress of educational development in Tibet is obvious, but the problems are also serious and urgent.

Apart from language use, a more important question today is how to identify where the threshold of vitality of traditional Tibetan culture is and how to maintain it. Religion then becomes a key factor in Tibetan society because Tibetan culture is so closely linked to Tibetan Buddhism. On one hand, Tibetan Buddhism still maintains the form of "combination of religion and administration" without reform. The 14th Dalai Lama is the living Buddha and enjoys high religious and civic prestige among ordinary monks and Tibetan people as a tradition. Because the 14th Dalai Lama is in exile and leads a political movement internationally to negotiate with the central government, the government sees Tibetan monasteries and monks as untrustworthy. On the other hand, atheism is a key part of Communist ideology; the government always wants to control religion, and tolerates religious activities only in its most open-minded periods. This contradiction between Middle Ages-style Tibetan Buddhism and the Communist ideology of the Chinese government has to be resolved in the future. China may be able to learn from the experiences of other modern civic adminstrations in the west that have handled various kinds of religious organizations.

10

Residential Patterns and Social Contacts between Han and Tibetan Residents in Urban Lhasa

One of the key goals of our surveys in the TAR and other Tibetan areas since 1988 has been to evaluate the current state of Han-Tibetan relations and to analyze the factors influencing that relationship. Since the first street demonstration in Lhasa in 1987, Han-Tibetan relations have been of considerable concern in China. Since then, official Chinese documents and reports have tended to emphasize the financial assistance of the central government and other provinces of China in social and economic developments in Tibet. Overseas media tend to emphasize issues related to religious suppression, violation of human rights, ethnic conflicts in Tibet, and usually predict a worsening of Han-Tibetan relations. The Lhasa street riots on March 14, 2008, also led to many predictions. So, we wondered, what was the actual situation in Lhasa and elsewhere in Tibet? How do Han and Tibetan residents of Lhasa get along living side by side?

Because such issues have been very sensitive, our analysis does not rely on direct answers to questions about Han-Tibetan relations in field interviews. Instead, we concentrate on investigating residential patterns based on household registration records. Residential housing patterns tell us a great deal about the opportunities people have to mix with their neighbors (Taeuber, 1980: 280; Zanden, 1983: 227). Therefore, residential patterns are important indicators of the relations among groups (Wilson and Taeuber, 1978: 51–78), especially in cases involving in-migration of one ethnic group into the territory of another (Shannon, 1973).

Lhasa is extremely important for studying ethnic relations in Tibet. The history of Lhasa can be traced back 1,300 years. In the seventh century Songtsen Gampo unified the Tibetan areas and moved his administrative center from Lhoka to Lhasa. He built the Jokhang Temple and the Ramoche Temple; then the Barkor streets around the Jokhang appeared and became the core of this city. In the middle of the 15th century the Fifth Dalai Lama was reaffirmed as the leader of Tibet by the Qing emperor and Lhasa was expanded as the administrative center of the Tibet region (Tanzen and Zhang Xiangming, 1991b: 274). Since then Lhasa has become the

political, religious, cultural, trade and population center of Tibet, and been revered as a "holy city" by Tibetans (Goldstein, 1989a: 24–30).

According to the fourth national census, the total population of the Tibet Autonomous Region was 2,196,000 in 1990, of which 254,000 lived in cities and towns. There were 140,000 permanent residents in Lhasa City, making up 55.3 percent of the total urban residents of the TAR. The second largest city in Tibet, Shigatse, by contrast, had a population of only 30,000 in 1990 (SBT, 1992a: 32–35). In 2007 urban Lhasa had 181,991 permanent residents. As the largest city and the capital of the region, Lhasa is home to government institutions and organizations that manage administration, economic activities, energy, communication, finance, health care, education, transportation, tourism, etc.

Table 10.1. Han in Total Population in the TAR by County

Han in total population	**Number of counties**			
	1982	1990	2000	
Less than 1%	39	50	32	Han were less than 5% of the total population in 61 counties in 1982; in 64 in 1990; and in 59 in 2000.
1.0%–5.0%	22	14	27	
5.1%–10.0%	7	4	6	
10.1%–20.0%	2	2	5	Counties with more than 30% Han in total population in 2000: Lhasa, Nyingchi, and Gar.
20.1%–30.0%	1	2	0	
Large than 30%	1	0	3	
Total	72	72	73	

Sources: COT, 1983a: 40–63; 1992a: 38–43; 2002: 34–38.

From Table 10.1 we can clearly see the geographic concentration of the Han in the TAR. In 1999, 96.4 percent of people with official registration living in the TAR were Tibetans, 2.8 percent were Han and 0.8 percent belonged to other ethnic groups. Of the total Han population (80,837) in the TAR in 1990, 50 percent lived in the urban areas of Lhasa City (SBT, 1992a: 38).[1] In 2000 the percentage of the Han in the total population was less than 1 to 5 percent in 27 counties, and less than 1 percent in 32 counties. The two groups together makeup 80.8 percent of the total 73 counties in the TAR. A high concentration of Han in Lhasa makes this city very important for studying ethnic relationships in Tibet because Lhasa has been where the Han and Tibetans have met each other for decades. Lhasa has seen periods of tense and good ethnic relations. When the situation between the two groups is tense and there are problems, it is invariably in Lhasa that these tensions surface. But it is also in Lhasa where we see signs of positive relations. For example, according to the 1990 and 2000 censuses, 37.7 percent and 35 percent of all intermarriages (mostly between Han and Tibetans) took place in Lhasa.

Conditions for Social Interaction and the Factors that Affect Them

Before looking at the Han-Tibetan relationship in Lhasa in detail, it would be helpful to acquaint readers with the basic theoretical framework for the study of ethnic interaction in sociology. In order to have intensive communications, a basic condition is necessary: a large proportion of the members of the two groups need to have opportunities to meet and interact with each other.

Milton M. Gordon suggested seven dimensions, or variables, in studying racial and ethnic assimilation: (a) cultural assimilation, (b) structural assimilation, (c) intermarriage, (d) identificational assimilation, (e) attitude receptional assimilation (prejudice), (f) behavior assimilation (discrimination) and (g) civil assimilation (Gordon, 1964: 71). The conditions of social communication between groups may reveal the social distance between them in culture (language, religion), ethnic identity and prejudice, as well as the ability of each to penetrate the other's social networks at the primary level.

In general, sociologists study the situation and extent of inter-ethnic communication in the following ways:

1. Residential patterns. This tells us the possibilities for members of one ethnic group (including all ages, genders, occupations.) to meet members of other groups who might be their neighbors and to have contact with each other in their daily lives (Zanden, 1983: 227; Luhman and Gilman, 1980: 162). People are always very careful to choose the neighborhood when they move to another place. That is because neighbors sometimes may have frequent contacts in their daily life. The situations may be very dissimilar if members of two different groups either live in mixed neighborhoods or separately.
2. School patterns. This tells us how often school-age children of different ethnic groups communicate with each other. They may attend the same schools and same classes, or attend different schools segregated by ethnicity (Zanden, 1983: 230–231). Attention should also be given to the ethnic make-up of the teachers; their ethnic identity and attitude toward members of the other group usually have strong influences on their students.
3. Ethnic composition in the workplace. This indicates the opportunities that employed people from different ethnic groups have to meet each other and work together at their workplaces. Racial and ethnic discrimination in recruitment, promotion and pay in workplaces is a central issue in ethnic stratification (Horowitz, 1985: 669).
4. Ethnic make-up of customers at entertainment venues, such as local clubs. This allows us to determine the possibilities for members of different ethnic groups (especially the unemployed) to communicate with each other after work: whether or not they join the same clubs, go to the same bars, tea houses, cinemas, theaters, etc. Penetrating informal social networks is an important indicator of ethnic assimilation (Gordon, 1964: 71–73).

5. Ethnic composition of religious organizations. This indicates how often different ethnic group members have the opportunity to meet each other in their pursuit of religious activities, which in turn strengthen the shared identity (Glazer and Moynihan, 1970: 203).
6. Individual spontaneous contact. Apart from the various forms of social communication mentioned above, individual residents or families usually maintain a social network that could include relatives of the family as well as friends (Ma Rong, 1987: 394–405). The friendships have formed over the years and could include schoolmates, colleagues, neighbors, former playmates, etc. These informal, spontaneous relationships are important in people's lives and analyzing friendship networks allow us to explore in-depth personal communication among ethnic groups.

These six criteria of inter-group contact and communication are critical in studying racial and ethnic relationships at an aggregate level. Of the six, residential patterns, school patterns and workplace make-up are the most important, representing the most important aspects of individuals' lives: daily activities, study and work. These three are also the most stable indicators and, as a result, the easiest from which to obtain relevant data. This chapter will concentrate on examining the situation at the aggregate level so individual circumstances will not be discussed here.

The conditions under which inter-ethnic communications take place can be studied at three levels: general contact within a larger community, closer and more frequent contact within a small community or a group (Table 10.2) and at the individual level.

Table 10.2. Main Aspects in Studying Ethnic Communication

Aspects	**Circumstances**	**Members Involved**	**Issues to Study**	**Level of investigation**	
				Level 1	Level 2
Residence	Neighborhood	All	Ethnic structure of residents	Block, residential committee	Yard, building
School	Classroom, campus	Students, teachers	Ethnic structure of students (teachers)	School, university	Class, department
Work unit	Office, working place, etc.	Employed	Ethnic structure of employees	Work unit, enterprise	Workshop, division,
Entertainment	Club, etc.	All	Ethnic structure of customers	Association, club	Group
Religion	Church	Believers	Ethnic structure of church members	Branch, sect	Church, temple
Social network	No special	All	Ethnic structure of friends	General friend circle	close friends

Level 1: for general contact within a larger community;
Level 2: for closer and more frequent contact within a small community or a group.

Generally communication between ethnic groups in all its forms is very complex, dynamic and affected by various factors. The most important ones related to this study are:

1. Historical factors. The historic relationship between ethnic groups may have a positive or negative impact on the relationship (Pye, 1975: 489–497). The wars between Israel and the Arab countries still affect the relationship between the Arabs and Jews in Israel today (Tessler, 1981: 167–169). Another example would be the former Yugoslavia, which experienced ethnic warfare followed by decades of ethnic harmony and integration only to return to the ethnic strife of long ago.
2. Language factor. Language barriers, if they exist, certainly have a negative impact on communication between ethnic groups (Gordon, 1964: 70–71). That is why people have concerns about the ethnicity and language of any potential new neighbors. The language factor is more important for school children who could be segregated by school or class because of a different language of instruction. Although there can be cases of acculturation without integration (Zanden, 1983: 277), language is still a very important factor in communication in a pluralistic society.
3. Religious factor. Ignoring or disrespecting objects that other groups worship will always cause tension. People's social norms, value judgments and customs are usually related to their religious beliefs. For example, Muslims are forbidden to eat pork, and because the meat they eat must be ritually slaughtered (*halal*) they eat in their own restaurants or dining rooms. If the customs and religions are not given the respect demanded by their followers, it leads inevitably to dissatisfaction and conflict (Ma Yin, 1981: 18). In some cases, religion has become an essential component of ethnic identity and membership (Nagata, 1981: 92). Some studies have found that churches played important roles in residential segregation (Simpson and Yinger, 1985: 309–315).
4. Traditional economic activities. Different ethnic groups sometimes have different traditional economic activities. For example, in China, Mongolians have been engaged in animal husbandry for centuries, the Erlunchun group in hunting, and the Han in agriculture (Fei Xiaotong, 1989: 16–17). Such differences in economic activities may affect customs and place limitations on individual contact at the workplaces (Sullivan, 1978: 166–167).
5. Type of social systems (institutions). There are different types of social systems among different ethnic groups for various historical reasons. For example, the serf system in Tibetan society and slave system in Yi society (an ethnic minority who live mainly in Sichuan and Yunnan) were very different from the tenant system in Han society and this difference had a significant impact on ethnic relations (Li Weihan, 1962: 101–110).

6. Policy implications. The policies designed directly or indirectly for ethnic minority groups and the relevant laws or regulations regarding regional autonomy, language use, employee recruitment, school admission, intermarriage, residential settlement, etc., might have a strong impact on racial and ethnic relationships (Ma Yin, 1981: 14–16; Connor, 1984: 254–277).
7. Impact of important events. Under certain circumstances, an individual event that has great meaning (positive or negative) to one group might have a strong impact on ethnic relations for a period of time. It could influence ethnic relations in one area or in the whole country. For instance, the Indian Army's occupation of the Sikh Golden Temple in 1984 led to the assassination of Prime Minister Indira Gandhi and created a serious Hindu-Sikh fissure that remains to some degree long after these tragic events.

This chapter will mainly discuss the findings of our 1988 survey and follow research with regard to residential patterns, ethnic make-up of workplaces and school patterns in Lhasa. Because we focus on "unit households" when we discuss residential patterns the first two criteria will be combined in our discussion. Finally, we will also discuss the major reasons for the residential patterns currently in Lhasa and the factors affecting that situation.

Residential Patterns in Lhasa

The household-registration system in China is unique and was established in the 1950s in the framework of the planned economy. Throughout China permanent residents have to obtain an official residential registration from the local public security station. Everyone is classified as either an "agricultural resident" or a "non-agricultural resident," according to the location of their residence and the economic activities in which they are engaged. This registration regimen requires that all citizens of China possess a residence card (*hu kou bu*) that verifies their status. The registration "units" are public security police stations in urban neighborhoods (usually with populations of 10,000 to 30,000) and communes/*xiang* in rural areas, and any transfer from one unit to another, even within the same city or county, needs official permission and will be recorded.

Under the centrally planned economic system, most non-agricultural residents lived in cities or towns and worked for a state-owned entity, which provided them with not only their jobs but also their grain coupons (through rationing) for food and housing. There were no private enterprises before the 1980s and all urban laborers were employed by the government through various systems. This group included some sent to work in the rural areas but who maintained their non-agricultural status and continued to receive benefits such as subsidized food and retirement and

health-care benefits that the state provided only to non-agricultural residents and government employees. Agricultural residents are peasants and herdsmen who were responsible for their own food supplies and welfare. The situation started to change several years ago when the government included rural residents in its "national welfare security programs for low-income families." The government now provides financial subsidies to rural families whose annual incomes are lower than regional standards.

Within the same city or town, residents were allowed officially to change their residential registration from one individual household to another, for example, upon marriage. However, the transfer of status from agricultural to non-agricultural was extremely difficult and required government approval. In 1988 we were told that the annual quota in Lhasa open to applicants who asked for a spouse transfer or family reunion because their spouse or old parents lived in rural areas was about 0.2 percent of the urban population. By effectively curtailing the movement of rural people to urban areas, the government controlled the number of permanent urban non-agricultural residents who receive government subsidies. It also created and policed a hierarchical structure with villagers at the bottom and residents of large cities at the top. This rural-urban division makes China a dual society. There are many discussions about the reform of this rural-urban dual system, because when millions of rural laborers arrive and work in cities but receive different treatment from urban residents, social tension arises, as do questions about equality and justice.

In urban areas some large work units, which were government institutions and enterprises, could also register as institutional unit households (*dan wei ji ti hu*). In these instances, the respective units obtained grain and coupons for other commodities for all individuals in the entire unit household and distributed them among its associates. The coupons were procured from the local public security police stations that administered the registration system.

Rationing ended around 1990. Since the reforms of the 1980s, people can now travel freely and live and work wherever they choose. But the hierarchy of benefits remains. Those who come from rural areas without a permanent registration in cities are still discriminated against in many ways, including property transactions, pensions, health care, schooling for their children, lowest income allowance, and other benefits. At the same time, job opportunities and higher income continually entice farmers to move to cities. More and more individuals are now living in places where they are not officially registered. These temporary migrants or peasant workers have become a necessary part of the urban labor force and make significant contributions to the urban economy and export industry.

The registration files of unit households in most Chinese cities include only unmarried young employees who have recently been recruited from among college or high-school graduates and live in the unit's dormitories. When they get married and rent/purchase their own apartments their registration will be transferred into the common individual residential household.

The residential registration system in Lhasa operates somewhat differently from that in other Chinese cities. In Lhasa individual urban households (regulated by "resident committees" — *jiu min wei yuan hui*) and members of unit households are two separate categories regulated by two different district office divisions (*jie dao ban shi chu)*. Most individual urban households live in traditional Tibetan-style houses in old urban areas. These houses belong to the residents themselves or the local governments that confiscated these houses in the late 1950s when their owners fled into exile with the Dalai Lama. Some confiscated houses have been returned to owners who have recently returned to Tibet from India. In addition, some Tibetans (both cadres and rich residents who used to live in other towns in the TAR) have, in recent years, built or purchased Tibetan-style new houses in the suburbs. Many Tibetan cadres who serve in prefectural or county governments now own houses in Lhasa or Chengdu (capital of Sichuan Province) for their retirement.

The unit households in Lhasa include all the members of the respective unit (employees and their dependents). In other words, they include not only unmarried individuals but also dependents of all employees who would together be registered as individual households in other cities. The size of these unit households varies from fewer than 50 people to more than 2,000. Before the 1990s the small unit households were mainly service institutions and stores (such as cinemas, photo studios, etc.) in the old urban district and their employees were mainly Tibetans. These service units were transferred to private enterprises during the 1990s, and they started to hire temporary migrants. In contrast, the larger unit households have maintained their ownership status in the reform process. They are governmental institutions, hospitals, universities and large enterprises. For example, a transportation venture that owns several hundred trucks has more than 2,200 employees and dependents. To a large extent, the unit households in urban Lhasa evince not only the residential patterns of ethnic groups, but also the ethnic composition of work units. Because schools recruit students from nearby neighborhoods, the ethnic structure of unit households is also related to the ethnic composition of schools. Therefore, three dimensions of ethnic interactions in Table 10.2 are mixed together in unit households in Lhasa.

The unit households in Lhasa only keep records on the number of individual employees and dependents who live in the unit separately. No information is kept for family-based households within the units. These units are actually registered as collective households. This situation makes the sampling of family households within unit households impossible. It also makes the conversion of a person's registration from a unit household to a resident committee difficult in Lhasa. The places where unit households live are mainly newly built apartment buildings. Because most of their residents serve in Lhasa for only a designated period of time (mostly three years, some eight years), these apartments, which have all the necessary equipment and furniture, are used as unit dormitories. Since the 1980s, these circular employees have been allowed to keep their original permanent

registration but received a special registration status in Lhasa during their service term there. The units have their own retail stores, dining halls, transportation teams and kindergartens; some large units have their own primary and middle schools, and even transported their own supplies from Golmud before the railway reached Lhasa in 2006. These units are more or less self-supporting communities.

Permanent residents of the urban district in Lhasa are under the jurisdiction of six "district offices" (*jie dao ban shi chu*) and four suburban *xiang* (at township level)[2] depending on their place of residence. These six district offices and four *xiang* are, in turn, under the jurisdiction of nine public security stations whose locations are shown in Figure 10.1. These offices and *xiang* are classified into two groups:

(a) The six district offices around the Jokhang Temple are in the old urban area of Lhasa, where they are overseen by four public security stations (*Barkor, Kyire, Tromsig Khang, Jebum Gang*). Each of the district offices supervises about four residential committees and 30 to 50 unit households. All residents of this entire area are registered as non-agricultural residents.

(b) The remaining four *xiang* are in a zone around the old urban district of Lhasa. There are no residential committees here but only unit households made up of non-agricultural residents in addition to the individual households under the jurisdiction of the *xiang* (the former commune), which includes the peasants (agricultural residents) living in suburbs. Figure 10.2 shows the basic residential pattern (not the precise geographic map) of the residents in Lhasa by the classification of district offices/*xiang* to which they belong and their residential-registration status.

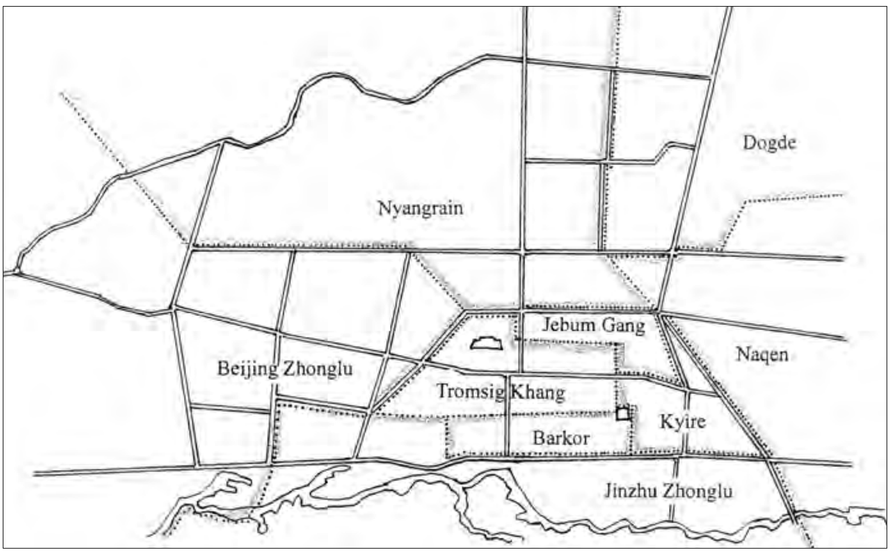


Figure 10.1. The Location of Nine Public Security Stations in the Urban Areas of Lhasa City

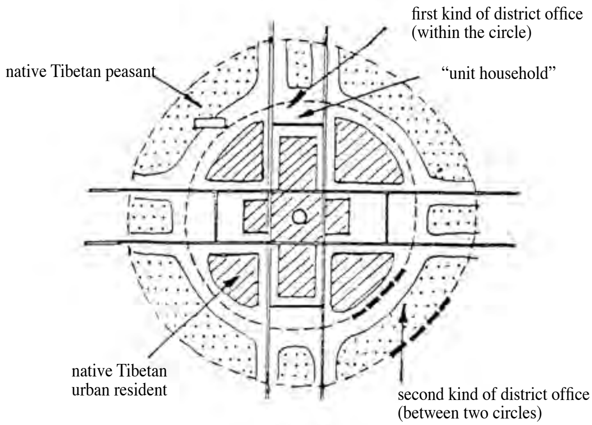


Figure 10.2. Residential Patterns in the Urban Areas of Lhasa City

According to official statistics, residents under the residential committees are mainly native Tibetans who have lived in urban Lhasa for generations. There were 8,396 individual urban households included in these residential committees by the end of 1987. Among them, more than 95 percent were Tibetans, fewer than 20 households were Han, about 300 households were Hui and 20 belonged to other groups. Most areas under the four district offices (within the smaller circle in Figure 10.2) are situated within the old urban area of Lhasa, and were formed around the late 17th century (Lhapa Phuntso, 1984: 42; Trinley Chodrak, 1985: 78; Ma Rong, 1991).

Except for monasteries, which are also registered as unit households, the residents in other unit households in Lhasa are government employees and their dependents. These residents can be divided into three groups: (1) Han who migrated to, and have worked in, Lhasa for a period of time under government arrangement (42.9 percent of the total), (2) Tibetans who migrated to Lhasa from other areas of the TAR or other Tibetan areas in other provinces (about 35 percent) under government arrangement, and (3) native-born Tibetans from individual urban households from the old urban district who acquired their jobs through a process of affirmative action in employee recruitment. They were recruited upon graduating from college/university (or middle/high schools during the 1960s and 1970s, when educated Tibetans were scarce) (about 20.4 percent). The remaining 1.7 percent belonged to other ethnic group members. The Han/Tibetan ratio varies by district office. The structure of residents in urban Lhasa remained the same in 2005 (Ma Rong and Tanzen Lhundup, 2006: 136) but the total number of unit households and their population size fell after the reform. According to the 2000 census, the

total number of unit households in the urban district of Lhasa was 5,626 compared with 66,316 of family households. The total population of the unit households was 35,675 compared with 187,326 of family households (Lhasa Census Office, 2002: 2–3). In 2000 each unit household averaged only 6.34 persons. That means many small units still remain under traditional state management.

Those who are governed by the *xiang* are native Tibetan peasants who are classified as agricultural residents. The total number of peasant households was 2,354 in 1986. These *xiang* are situated in the Lhasa suburbs and ranked at the same level in administration as urban district offices. Therefore, the urban area of Lhasa City is made up of three kinds of basic residential organizations: resident committees, unit households and villages. These organizations are administered by two different middle-term authorities: district offices and *xiang*. The individuals themselves fall into different registration types. The residents in the first two organizations are non-agricultural and those in the village are agricultural. Table 10.3 lists Lhasa residents by the status of their residential organizations as well as by their residential, ethnic and migration statuses.

Among 108,000 total permanent residents in Lhasa City in 1987, about 27,500 were native-born Tibetan urban residents who lived in the old urban district; about 37,800 were temporary Han residents and 33,300 were Tibetans (about 70 percent migrants and 30 percent natives) who lived in unit households; and about 8,000 were native-born Tibetan peasants who lived in nearby suburbs.

Table 10.3. Structure of Urban Lhasa Residents

Administrative Level	Residential organization	Registration status	Structure of residents	Migration status	Occupation
District office	Residential committee	Non-agricultural	Tibetan	Native-born	Various jobs*
	Unit household	Non-agricultural	Tibetan, Han	Tibetan: majority are migrants	Government employees
Xiang	Unit household	Non-agricultural	Tibetan, Han	Han: migrants	Government employees
	Village	Agricultural	Tibetan	Native born	Farmers

* includes self-employed, government employees, laborers in collective enterprises and unemployed.

These three groups all lived in separate zones of the city. Most of the unit households in Lhasa have large yards surrounded by walls or fences, with a majority of the employees and their families living and working within this area. As a consequence, contact with native Tibetans who reside mainly in the old urban district or in the suburbs is limited, especially for the Han. As a result, the Han are, to a large extent, disconnected from native Tibetans in Lhasa.

As to the houses people live in, construction materials and architectural styles are different from area to area. Modern-style buildings, which predominate in the unit household zone, are made of brick, and Tibetan-style houses, in the old urban district, are made of stone with distinctive Tibetan roofs, windows and stairs. Because of these visual differences visitors to Lhasa can distinguish them easily from each other.

In the past decade, because of both high population growth in the old urban area and the influx of temporary migrants to Lhasa, many native Tibetan residents have purchased houses in newly built residential quarters and moved there while renting their houses in the old urban center to migrants for business. Then the residential pattern in urban Lhasa starts to change.

Ethnic Structure of Unit Households and Their Index of Dissimilarity

Although the two ethnic groups live in largely segregated areas, they do have opportunities to come into contact with each other, both in the workplace and in their homes. This is predominantly true for unit households and this study will, therefore, concentrate on the inter-ethnic contacts within unit households. The population compositions of ethnic groups in these urban district offices and *xiang* in 1990 are shown in Table 10.4.

It is clear that there were very few Han residents living in the 25 residential committees under the six district offices in urban Lhasa. The Han comprised only 4.3 percent of this population while Tibetans made up 91.6 percent. Among unit households, Han made up 44.3 percent under the district offices and 40.7 percent under the *xiang*. In the 16 villages under the four *xiang*, Tibetans constituted the vast majority (98.4 percent).

With 95.5 percent of the total Han population in Lhasa living in unit households, daily contact between Han and Tibetan mainly took place within these unit households. A small proportion of the Tibetan employees were recruited from among the native Tibetan residents of Lhasa, allowing for some Han-native Tibetan interactions, although this contact would have been quite limited. On the other hand, Han residents of the unit households had no avenues through which they could interact with native Tibetan peasants living in suburban villages. This is why we focused our analyses on the unit households in Lhasa.

The index of dissimilarity (ID) is used often in studies of residential patterns in the West. It indicates the differences between the percentages of ethnic groups in the total population of small areas (counting units) and the percentage of those groups in the total population in a large district or a city (Farley, 1977: 500). The value of the index of dissimilarity ranges from 0 to 100, indicating what percentage of the members of either ethnic group (Group A or Group B) has to move across a "counting unit boundary" in order to reach the same percentage as in the whole area (Wilson and Taeuber, 1978: 51–78).[3]

Table 10.4. Ethnic Structure of District Offices and *xiang* Residents (1990*)

District office/xiang	Primary organization	Tibetan		Han		Others		Total	
		Number	%	Number	%	Number	%	Number	%
District Office:									
Kyire	5(C)	8,163	85.2	268	2.8	1,155	12.0	9,586	100.0
	61(U)	6,031	62.9	3,368	35.1	193	2.0	9,592	100.0
Jebum Gang	5(C)	8,126	97.4	163	2.0	53	0.6	8,342	100.0
	59(U)	4,942	51.5	4,468	46.6	182	1.9	9,592	100.0
Tromsig Khang	4(C)	5,730	96.4	165	2.8	45	0.8	5,940	100.0
	11(U)	971	76.5	254	20.0	45	3.5	1,270	100.0
Kunde Ling	4(C)	3,180	92.4	251	7.3	11	0.3	3,442	100.0
	136(U)	12,364	48.4	12,888	50.5	290	1.1	25,542	100.0
Tashi	3(C)	1,720	74.4	507	21.9	86	3.7	2,313	100.0
	14(U)	3,430	69.5	1,426	28.9	81	1.6	4,937	100.0
Barkor	4(C)	7,142	94.4	255	3.4	167	2.2	7,564	100.0
	44(U)	1,919	49.9	1,862	48.4	68	1.7	3,849	100.0
xiang:									
Naqen	1(V)	4,152	95.5	194	4.5	0	0.0	4,346	100.0
	17(U)	3,716	54.8	2,878	42.5	186	2.7	6,780	100.0
Tselgungthang	3(V)	4,025	99.8	7	0.2	0	0.0	4,032	100.0
	26(U)	1,582	79.0	406	20.3	15	0.7	2,003	100.0
Dogde	5(V)	1,983	99.9	0	0.0	2	0.1	1,985	100.0
	72(U)	7,528	51.3	6,832	45.5	327	2.2	14,687	100.0
Nyangrain	7(V)	2,265	99.5	3	0.4	2	0.2	2,276	100.0
	64(U)	7,372	62.8	4,223	36.0	143	1.2	11,738	100.0
Sub-total:									
6 district Offices	25(C)	34,061	91.6	1,609	4.3	1,517	4.0	37,187	100.0
	325(U)	29,657	54.1	24,266	44.3	859	10.6	54,782	100.0
4 *xiang*	179(U)	20,198	57.4	14,339	40.7	671	1.9	35,208	100.0
	16(V)	12,425	98.4	204	1.6	4	0.0	12,633	100.0
Total		96,341	68.9	40,418	28.9	3,051	2.2	139,810	100.0

(C): residential committee; (U): unit household; (V): village.
* The 2000 census publications do not provide such detailed information.
Source: Development and Planning Committee of Lhasa Urban District, 1990: 232–282.

As is pointed out in many studies, it is very important to choose an appropriate "counting unit" in calculating the ID (Taeuber and Taeuber, 1965), avoiding units that are too small or too large.[4] In calculating the index of dissimilarity, blocks (or census tracks) are usually used as the counting unit in urban areas as well as

in natural villages in rural areas. In the Lhasa study, unit household seemed to be the proper counting unit to calculate the index of dissimilarity that indicates the differentials of the ethnic structure of the unit households from the ethnic structure of the district office to which they belong.[5] The result of the calculations is shown in Table 10.5. Because the published 2000 census data collection does not provide detailed information by unit household, a comparison between the 1990 and 2000 census results cannot be made.

Table 10.5. Index of Dissimilarity (ID) in Unit Households in Lhasa City

District office		# unit household	Han-Tibetan ratio (Han as 1)	ID of resident	# of units with Han double Tibetan	# of units with Tibetan double Han	# of unit with 100% Tibetan	Ratio of Han-Tibetan employee (Han as 1)	ID of employee
Barkor	1988	39	1: 1.70	43.9	5	19	5	1: 2.07	45.1
Nyangrain	1988	52	1: 1.22	46.2	5	24	1	-	-
Kyire	1990	61	1: 1.79	34.1	9	29	3	-	-
Jebum Gang	1990	59	1: 1.11	39.6	12	24	6	-	-
Tromsig Khang	1990	11	1: 3.82	40.6	1	9	2	-	-
Kunde Ling	1990	136	1: 0.96	42.8	48	30	3	-	-
Barkor	1990	44	1: 1.03	57.2	14	19	3	-	-
Tashi	1990	14	1: 2.41	35.8	2	7	0	-	-
Dogde	1990	72	1: 1.10	40.1	5	19	2	-	-
Naqen	1990	17	1: 1.29	48.1	5	9	0	-	-
Tselgungthang	1990	26	1: 3.90	53.1	5	14	7	-	-
Nyangrain	1990	64	1: 1.75	38.7	5	33	7	-	-
Total	1990	504	1: 1.29	-	110	193	33	-	-

In the 1988 survey we selected one district office (Barkor) and one *xiang* (Nyangrain) to calculate the ID as representatives of two kinds of residential patterns. These two were relatively near the old urban district and the Han/Tibetan ratio (around 1: 1.2) in their unit households was higher than average. The other district offices in western and southern Lhasa have higher proportions of Han in their unit households. The ID calculated for these two offices was 43.9 to 46.2. This means that 43.9 percent to 46.2 percent of their residents (either the Han or Tibetans) would move across unit households; only by that measure the ethnic structure of every unit household would be the same as that in the whole district office. It indicates a certain level of Han-Tibetan residential segregation among these unit households.

From Table 10.5, we can see that the ID changed in 1990 compared with 1988. The ID increased from 43.9 to 57.2 in two years in Barkor, and decreased from 46.2

to 38.7 in Nyangrain. That indicates there is no certain trend (either increase or decrease) in changes in ethnic segregation in Lhasa during the period.

From Table 10.5 several points can be summarized: (a) the ratios between the Han and Tibetan residents among unit households were generally in balance (1: 1.2 to 1: 1.3 if monasteries were excluded); (b) the IDs were 34.1 to 57.2; and (c) the IDs were 32.8 to 35.8 if monasteries were excluded. Almost all the people under the jurisdiction of the monasteries were Tibetans and their numbers were quite large.[6]

The only IDs calculated for other minority ethnic groups in China were from the author's survey in Inner Mongolia in 1985. This is the only comparison that can be made in China. For Han and Mongolian residents, the ID calculated for 26 villages in Ongniud Banner (Inner Mongolia) was 54.8, higher than that in Lhasa City (Ma and Pan, 1989: 185). A study of segregation in U.S. cities from 1960 to 1970 found that the index of dissimilarity varied from 61.4 to 97.8 in 50 U.S. cities for blacks and whites in 1970, and 30 cities had an ID higher than 90, indicating that the degree of racial segregation was high. For example, at the block level in Chicago, the index of dissimilarity was 93 in 1970 (Simpson and Yinger, 1985: 259–262).

But it should be pointed out that the ID calculated in Lhasa only refers to unit households, which are already largely segregated from the old urban area of Lhasa where almost 100 percent of the residents are Tibetans. The IDs here show that, even within the territory of unit households, there is still quite a high level of segregation. Table 10.5 gives the number of units where there was a higher level of concentration for either Han or Tibetans. Among the 504 unit households we examined in 1990, there were 110 units where the number of Han was double that of Tibetans, and 193 units where the number of Tibetans was double that of the Han. The question then becomes what is it about a unit that encourages high concentrations of one ethnic group? We do know that ethnic preference in employee recruitment is one significant issue in ethnic discrimination and this may play a role in housing patterns (Horowitz, 1985: 669).

The Han-Tibetan ratio is roughly equal in 303 unit households. Three groups (there were a total of 33 unit households in these three groups) comprised only Tibetan residents: (a) religious organizations, e.g. monasteries; (b) local government and its institutions, e.g. the Barkor Public Security Police Station and the Barkor Primary School; and (c) local stores and trade agencies.

In reference to the first group, it is not surprising that Han seldom became monks in Tibet. Tibetan Buddhism (Lamaism) is different from the Buddhism (Mahayana) practiced in the Han areas (Karan, 1976: 65–68). Because residents of the old urban district are Tibetans, it does not seem surprising to have Tibetans as officials in the local government that, after all, deals mainly with native Tibetans.[7]

Moreover, Tibetans are the majority of the employees in most enterprises in Lhasa. For example, 76.2 percent of the employees of the City Carpet Factory were

Tibetans, as were 78.3 percent of the City Publishing Corp, 79.5 percent of the City Cement Factory, 81.2 percent of City Construction Company and 91.5 percent of the TAR Chemistry Factory. The number of Tibetan industrial workers, clerical workers, professionals and technicians has been increasing rapidly since the 1960s, not only in Lhasa but throughout the TAR.

Generally, larger numbers of Han employees can be found in units that require higher educational backgrounds and more technical expertise. For example, in 1990 Han made up 70 to 80 percent of all employees in truck transportation teams, 62 percent in the City Post Office and 65 percent in the TAR Bureau of Sciences and Technology. There are more Tibetans than Han in units dealing with security, religion, local administration, and cultural and trade affairs. For example, Tibetans comprised 65 percent of all the employees in the TAR Bureau of Public Security, 70 percent in Tibet University, 71 percent in the City Court, 80 percent in the Urban District Government and 97 percent in the Traditional Tibetan Medicinal Hospital. Since educational systems in Han areas are relatively more advanced than those in Tibetan areas, it will take some time for more Tibetans to be eligible for jobs that require advanced training.[8]

In the TAR the proportion of Tibetans who belong to the local Communist Party organizations and governmental administration, at all levels, is generally high. It seems that the lower the administrative level, the higher the proportion of Tibetans. At the county level most cadres are Tibetans and at the *xiang* levels almost every single cadre is a Tibetan. For example, there were 594 cadres under the Lhasa Urban District Government in 1988, and Tibetans comprised 80.8 percent of the total. Among the 92 cadres who worked in Party organizations, 86 percent were Tibetan (11 percent were Han, three percent were from other groups). Among 231 cadres in governmental administration, 80 percent were Tibetan (17 percent were Han and three percent others). Among 271 cadres who worked in schools and the education system, 75 percent were Tibetan (21 percent were Han and four percent from other groups).

This situation is similar to that in other regions inhabited by ethnic minorities. Major leaders of these autonomous regions are from the minority groups. Also, there is a higher concentration of cadres and professionals from minority groups in Communist Party organizations and administrations compared with the situation in other units. In general, there are relatively large proportions of Han found in the occupational groups classified as clerical, professional and technical and service worker. Only when more scientists, technicians, managers and teachers from ethnic minority groups have been trained can the occupational structure of minority groups begin to change. Then the ethnic ratio among work units will be more in balance and the level of ethnic bias will decline.

Residential Patterns of Spontaneous Temporary Migrants

Han who are officially registered to live in Lhasa are not the only Han who actually reside there. The freedom for all Chinese citizens to travel, since the 1980s, has created a far more mobile population than at any time since 1949. In the summer of 1988 there were an estimated 40,000 to 50,000 temporary sojourners in Lhasa, about 40 percent of the total number of permanent residents in the city. In 1992 permanent residents numbered 125,828 while the temporary migrants were estimated at 60,000 (Dorji Tseden and Gyaltsen Norbu, 1995: 552).

The 2000 census indicates that compared with 119,494 residents who officially registered in Lhasa Urban District (114,146 lived there; 2,345 had left Lhasa for longer than six months; 2,955 were "waiting for classification" and 48 were working abroad), 87,473 persons were not officially registered in their current residence in Lhasa (12,678 from suburb *xiang*, 25,937 from other counties outside Lhasa Urban District and 48,858 from other provinces) (Lhasa Census Office, 2002: 14–18, 24–25). These people were classified as temporary migrants in urban Lhasa and they consisted of 73.2 percent of permanent residents of urban Lhasa. The number of temporary migrants in Lhasa was estimated at 200,000 in summer and 100,000 in the winter of 2005 (Ma Rong and Tanzen Lhundup, 2006: 139). Because the total number of temporary migrants was so large and they were so active in economic activities, their social-contact patterns and their residential patterns could have had an impact on the Han-Tibetan relationship. These sojourners can be classified into six groups based on their motives for going to Lhasa.

1. Several thousand Tibetans from both inside and outside the TAR habitually go to Lhasa on pilgrimage. Most arrive after the harvest in October and leave before the Tibetan spring festival in February (Liu Rui, 1988: 152–153). Most of them live in special camps set up in the suburbs for pilgrims (e.g. there were 431 people in the pilgrim camp under the management of Jebum Gang District Office in 1990), some stay with relatives in the old urban district and some stay in hotels. Most have little or no contact with the Han in Lhasa.
2. Tibetan businessmen who come mainly from Qinghai, Gansu and Sichuan provinces as well as Chamdo. They buy traditional medical materials, wool, leather, jewelry, handicrafts, butter, tea, etc. from local people at the Lhasa markets and sell them in other provinces or in Nepal. They usually stay with local Tibetans and their business contacts in Lhasa are mainly Tibetans. Some of them reverse the pattern by buying consumer goods in other provinces and selling them in Lhasa.
3. Many businessmen from Han and other minority groups go to Lhasa to conduct business. These are mainly ethnic groups from Qinghai and Gansu provinces (especially from three Muslim ethnic groups: Hui, Sala and Dongxiang). The majority of them originally worked for government agencies engaged in long-

distance transportation of goods and some have managed to open their own stores in Lhasa. These Muslim groups have close relations with local Hui residents in Lhasa and often collaborate in their businesses. For example, there were more than 2,000 businessmen in Lhasa from the Lingxia Hui Autonomous Prefecture (Gansu Province) and there are more than 1,000 privately owned trucks running between Lhasa and Lanzhou (the capital of Gansu Province) to transport goods.

4. Historically the number of Han traders and service laborers in Tibet has been very small, but reform policies in the 1980s changed all that by not only allowing freedom of travel but also permitting the establishment of private businesses. The combination has attracted Han by the thousands into Lhasa. These entrepreneurs and workers are mostly from Sichuan Province and some even from the distant eastern coastal provinces, as discussed in Chapter 5.[9] A large proportion of them (especially those who own stores or restaurants) lived with relatives in the unit households. Such connections would help them to rent a street store and receive a business license; those are the basic conditions that allow them to run a business in Lhasa.[10] The rest rent rooms in the old urban district and work as street peddlers or service laborers. They work in various businesses, including restaurants, hotels, stores, street vendors of fast food, shoe repair and furniture making. They are flexible in that they often adjust their work according to the needs of the market and some even begin to learn a little Tibetan. But in household interviews in 1988 and 2005, we found that they have limited personal daily contact with their Tibetan customers or house owners.[11]

   One of our research subjects in the 2005 survey was a study of taxi divers in Lhasa. We found that among 15 taxi companies in Lhasa in October 2005, eight were owned by Tibetans and seven by Han. But Han consisted of 89 percent of all 1,923 taxi drivers. Han from Sichuan Province consisted of 36.9 percent of all taxi drivers (Ge Jing and Qu Lina, 2007: 78, 88).

5. In recent years some Han farmers have moved to Lhasa and settled in the suburbs, where they rent land from local Tibetan farmers and plant vegetables and raise poultry and pigs. In the 1980s a sizeable portion of the vegetables and meat available in Lhasa had to be transported long distances, and at considerable cost, from Sichuan and Gansu. Now these farmers produce some of these goods locally and sell them in the markets. They have built many greenhouses in the suburbs, reduced the prices for these products and succeeded financially to a great degree. It is not the first time the Han have supplied vegetables to the Tibetan market. Sir Charles Bell noted that "one often finds vegetable gardens of the Chinese in the suburbs of Lhasa and other cities, the vegetables produced in these gardens were sold in Tibetan stores (Bell, 1946: 38)." He also noticed that on the dinner table of a Tibetan noble in the 1920s "all are Chinese vegetables except one or two (Bell, 1946: 119)."

6. Han construction workers who went in teams from nearby provinces (Sichuan and Gansu). They build office and dormitory buildings, houses and bridges and roads as well as engage in other kinds of construction projects for the government and the unit households. Those Han workers live at construction sites in the unit household zone, which is usually some distance from the old urban district. They move from one construction site to another and have almost no contact with native Tibetans.[12]

Apart from the above six groups, there are also tourists who visit for very short periods of time, usually one or two weeks, from other provinces of China or abroad. Their numbers are increasing but their stays in Lhasa are short, which is why they generally have a limited impact on local ethnic relations and are not discussed here.

It seems that these unarranged sojourners have remarkably similar residential patterns to those of the permanent residents. To a certain extent the residential patterns of permanent residents strongly influence the choices that temporary migrants make. Han temporary migrants usually prefer to rent a room in unit households where the majority is Han, while the Tibetan temporary migrants usually stay with Tibetans in old urban areas. It is clear then that there is ethnic separation of the Han and Tibetans in Lhasa for both permanent and temporary residents.

In recent years, there have been more successful Han or Hui businessmen renting whole houses along the street from Tibetan residents. These houses are usually two-level buildings. The businessmen and their families, sometimes their employees, sleep on the second floor and they set up shop on the first floor to sell goods. In the past, they used to rent rooms to open small shops in the daytime and went back to their relatives in unit households at night. Some of the houses that successful businesspeople rented were torched during the March 14 street riots.

The number of spontaneous temporary Han migrants in Lhasa is very large and varies by season. Sometimes in summer they can number up to one-third of permanent residents. Han entrepreneurs, artisans, salesmen, service workers and construction workers compete effectively with native Tibetans in local labor markets. During our household interviews many urban native Tibetans complained about this, indicating a source of rising tensions between Han and Tibetans.

Han-Tibetan Interaction in Primary and Middle Schools in Lhasa

School segregation is an important issue in studies of ethnic relations. The findings in surveys of Mexican Americans in California in 1970 and 1972 show that school segregation was closely related to residential segregation (Simpson and Yinger, 1985: 343). It was also established that school patterns were partly the result of

residential patterns (Wilson and Taeuber, 1978: 52). If members of two ethnic groups live in separate neighborhoods, their children are likely to attend schools within their own neighborhoods and will have limited chances to communicate with the children of other groups. Because the school years are so important for children's socialization, the opportunities, or lack thereof, to come into contact regularly with children of other ethnicities will determine their attitudes toward social diversity and the various ethnic groups different from their own.

By using school as the counting unit, the index of dissimilarity is also calculated for primary and middle schools in Lhasa in order to study school segregation (Table 10.6). In Tibet, Tibetan and Han students usually study in different classes where their own language is used as the language of instruction. We can find segregation in primary schools as well as in middle and high schools. There is also a certain level of ethnic concentration in universities, e.g. all students in the Department of Tibetan Language and Literature are Tibetans. Language differentials are the main reason for creating classes based on ethnicity. Because of an increasing demand from some local Tibetan intellectuals and from Tibetans abroad to strengthen the role of Tibetan language in society and education, it has become an official policy that Tibetan students study in Tibetan schools and classes in which Tibetan is the language of instruction, at least in primary school.

Table 10.6. Han-Tibetan Ratios in Primary and Middle Schools in Lhasa (1990)

	Number of Han	**Number of Tibetans**	**Han-Tibetan Ratio (Han as 1)**	**Index of dissimilarity**
Students				
7 suburban county middle schools	14	1179	1:84.4	58.7
11 urban middle schools	3554	5244	1:1.48	31.1
22 unit managed urban primary schools	1927	1704	1:0.88	52.1
18 urban district managed public primary schools	615	5553	1:9.03	_*
Employees (teachers and supporting staff)				
9 city managed urban middle schools and 5 urban primary schools	439	400	1:0.91	20.9
18 urban-district managed public primary schools	86	284	1:3.30	-*

* Cannot be calculated because of lack of school data.

Table 10.6 shows that school enrollment patterns in Lhasa parallel its residential patterns. By the nature of their relationship with the urban governmental administration, schools can be classified into four groups:

1. Public primary and middle schools managed by the local administration in counties and suburbs (*xiang*). Few Han residents and farmers live there and the student body is overwhelmingly Tibetan. In 1990, in seven middle schools in the counties and in the Lhasa suburbs, where the local residents are native Tibetan peasants, there were only 14 Han students in the middle schools of all seven counties. The index of dissimilarity was 58.7. Primary schools in these counties have similar patterns.
2. The 22 primary schools within the city managed by unit households.[13] Compared with the other sections of Lhasa there were more Han in these units (the ratio of Han to Tibetan was 1: 1.29). The ratio of Han to Tibetan students in these schools was about 1: 0.88 in 1990.

   In those units that managed primary schools, the student ratio was lower than the unit resident ratio for Tibetans. One reason, probably, is that the average population size of unit households with a majority of Han is larger than those with a majority of Tibetans. In the two district offices we investigated in 1988, the average population size was 421 for the unit households where the population of Han was double or more that of Tibetans; while the average size for the unit households in which the population of Tibetans was double or more that of Han was 126. A unit household can establish its own primary school as long as the number of employees and their children is large enough. Therefore, when the number of Tibetan children from unit households is too small they must attend schools in nearby neighborhoods. So the main reason Han and Tibetan students study in separate schools has to do with school circumstances. In short, students face segregation both in their residential and in their school situations. The index of dissimilarity for these unit primary schools was 52.1, indicating a high degree of segregation. This group has the highest concentration of Han in the Lhasa education system.
3. All middle schools (11 in total) in Lhasa are managed by the city government. Their students are from both primary schools managed by work units and those managed by the administration of the old urban district and therefore the Han/Tibetan ratio falls between the two conditions discussed above (1: 1.48). The ID was 31.1, lower than primary schools, and demonstrating less ethnic segregation in the middle schools. There were fewer Han students in middle schools than in primary schools because Han employees in Lhasa were mainly temporary workers who were too young to have children or who had sent their children back to their hometowns, where the quality of schools was usually better.
4. There were 18 public primary schools managed by the Lhasa urban administration. Because of the high concentration of Tibetans in both areas, the Han/Tibetan ratio among the students was 1: 9.03 in 1990.

There are more balanced ratios between Han and Tibetans among the employees of the Lhasa school system, in both primary and middle schools. The Han-Tibetan ratio was 1: 0.91 in the nine City Government-managed schools in 1990 with a much lower ID (20.9). In the 18 Urban District Government-managed schools, the Han-Tibetan ratio was 1: 3.30, a much lower ratio than that of the students (1: 9.03). Because most schools need teachers from both ethnic groups to teach different courses (e.g. Tibetan teachers for Tibetan-language courses and Han teachers for Chinese-Putonghua and mathematics courses) at the same time, the ethnic ratio is more balanced among school teachers. Those needs have been taken into account by the Education Bureaus at all levels of government.

Among these groups, contact between Han and native (not migrant) Tibetan students is most likely to take place in the fourth group — the public primary schools managed by the local administration. Of 18 primary schools under the management of the Urban District Educational Bureau, four are located in the old urban district and 14 in the suburbs. Of the four, only two will enroll both Han and Tibetan students; the other two enroll only Tibetans.

Table 10.7 shows the ethnic composition of classes in these two primary schools having both Han and Tibetan students in 1988. Under policies of the TAR Government on Tibetan language-teaching in schools, one school (*Shi yan xiao xue*: Experimental Primary School) began a Tibetan-language class in 1986 and all newly enrolled Tibetan students from that date were placed in that class. In another school (*Shi di er xiao xue*: City Second Primary School), the number of Tibetan-language classes has increased since 1986. For grades three to five there were 109 Tibetan students studying with 121 Han students in mixed classes, but for grade two all the new Tibetan students were placed into a solely Tibetan-language class. The school principal explained that because of pressure from Tibetan parents the school allowed 11 Tibetan students to enter a Han class. Those parents believe that learning Putonghua will benefit their children in the future. Another study confirms the basic patterns in schools in Lhasa. Of 16 classes at Lhasa Experimental Primary School, 10 used Putonghua as the language of instruction and six used Tibetan (Wu Degang, 2005b: 424).

Therefore, there is a clear inclination for Tibetan students to become more concentrated in classes taught in Tibetan. Since 1986, the phenomenon of both Han and Tibetan pupils studying in the same class has diminished. Because students usually have more contact with their classmates rather than those in other classes, the contact between Han and Tibetan pupils in school has become less frequent in recent years. This must have some negative impact on Han-Tibetan relationships in Lhasa. After 2003, Putonghua became more popular as the language of instruction, but the separation of Han and Tibetan students in class organization remains.

Table 10.7. Ethnic Composition of Classes in Two Primary Schools in Lhasa (1988)

Grade*	Experimental Primary School						City Second Primary School					
	Tibetan class			Han class			Tibetan class			Han class		
	#class	Tibetan	Han	#class	Tibetan	Han	#class	Tibetan	Han	#class	Tibetan	Han
First	2	81	0	1	0	64	3	155	0	1	11	42
Second	1	51	0	2	0	84	2	122	0	0	0	0
Third	0	0	0	3	68	83	1	65	0	2	38	46
Fourth	0	0	0	2	43	52	2	85	0	2	35	39
Fifth	0	0	0	4	96	90	2	72	0	2	36	36
Teacher	-	16	-	-	-	37	-	24	-	-	-	25

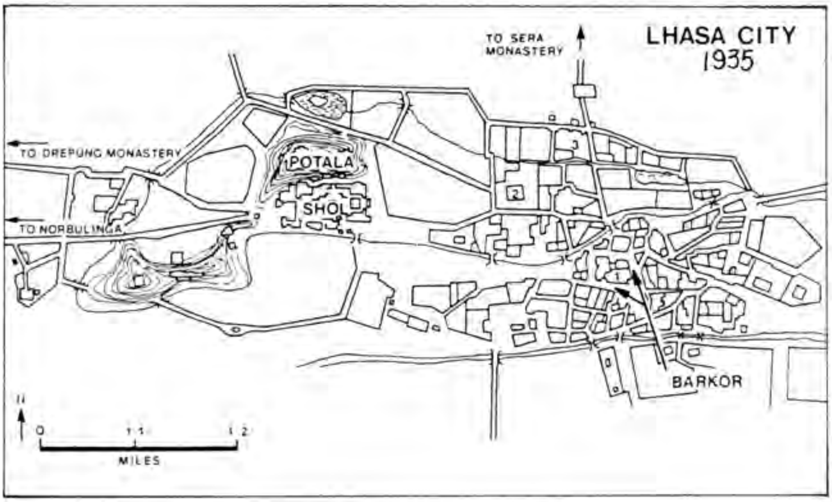
* Primary schooling in the TAR is a five-year system, which is different from the six-year system in most Chinese cities.

Factors Affecting Social Interaction between Han and Tibetans

The configuration of the present residential patterns in Lhasa has evolved for several reasons. The most important is the historical factor: the geographic distribution of residential, administrative and commercial activities was set many years ago. Cultural factors such as language and religion, as well as economic factors such as occupations and income differentials, have all affected Han-Tibetan intercourse.

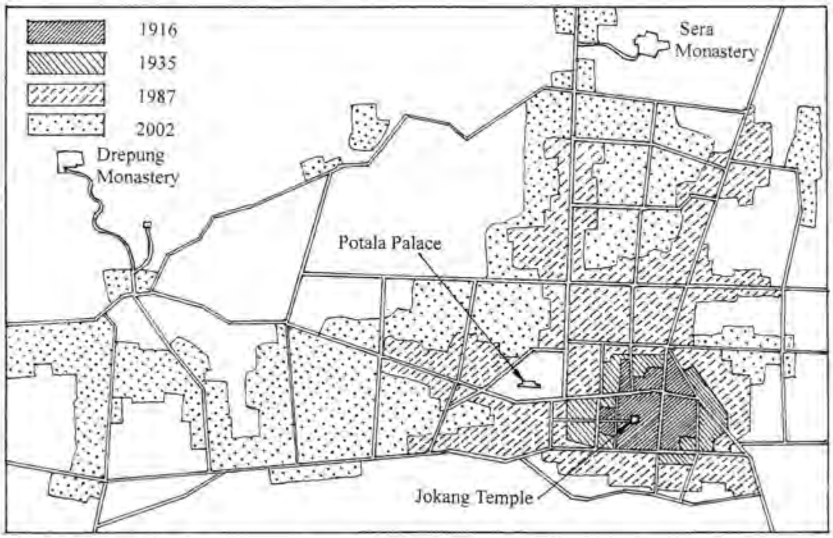
Residential patterns in Lhasa today have their origins in the 1950s. Today's old urban district is the same urban district of that time. Figure 10.3 shows that there was only a small residential area surrounding the Jokhang Temple in 1916. This area expanded in the 1920s and 1930s. It can be seen more clearly in Figure 10.4, in the geographic coverage of the core urban districts in 1916 and 1935, and the expansion of the city from then until today.

According to Spencer Chapman, in 1936, "the city itself is surprisingly small, a compact square of buildings only two or three miles in circumference (Chapman, 1940: 151)." "It was a thickly settled district with very narrow lanes and crowded two to four floor Tibetan style stone houses . . . [the area] to the east of the Jokhang was the old business area of Lhasa, containing numerous shops and the residences of shopkeepers (Karan, 1976: 55–56)." There was a population of 50,000 to 60,000 in Lhasa in 1936 including 30,000 to 40,000 monks. According to another study, the total population of Lhasa was about 30,000 in 1950, the area of the city was three square kilometers, and the total area upon which there was construction was 0.23 million square meters (Dorji Tseden and Gyaltsen Norbu, 1995: 552). The area around the Jokhang Temple was the core residential and commercial sector of old Lhasa.



KEY
1. Tsuglagang (Jokang) Temple
2. Reting Labrang (Shide)
3. Upper Tantric College
Source: Goldstein, 1989: map 3.

Figure 10.3. Lhasa City in Modern History



This map is based on:
1. The map of Lhasa, in P. P. Karan, 1976: 57.
2. The map of Lhasa, in M. Gostein, 1989: map 3.
3. The map of Lhasa City, Tibet Mapping Bureau, 1987.
4. The map of Lhasa City, Jin Shulan, Zhang Wubing eds. 2002:89.

Figure 10.4. Expansion of Urban Lhasa

Apart from the Potala Palace and the Jokhang Temple, there were many small monasteries and many *lingkas* (gardens) outside the central urban district.[14] Next to these monasteries and *lingkas* were some large stone buildings belonging to senior nobles and relatives of the Dalai lamas (Chapman, 1940: 150–170; Karan, 1976: 55). The headquarters of the *Amban* (the Commissioners of the Qing Court in Lhasa) was also situated outside the old urban district. These officials' buildings and nobles' houses constituted the outskirts of Lhasa at that time. If we consider the farms surrounding Lhasa as a "peripheral zone" or suburbs, then this area might be called the "middle zone." A map of Lhasa City in 1959, although based solely on a visitor's memory, provides detailed information about the old urban district (Taring, 1984).

In the late 1950s the occupants of these monasteries fled to India, and their houses and land around the central urban areas was used for public affairs and government institutions.[15] Some of the houses that belonged to nobles who fled were distributed among their servants and homeless poor. The residential sectors then expanded into the "middle zone." Many new units were established in the zone around the old urban district and then gradually expanded into the suburbs along the newly constructed roads (Karan, 1976: 56–58). In 2005 the residential area expansion reached the Drepung and Sera monasteries, which were far away from urban Lhasa in the 1950s.

Meanwhile, some stores and rebuilt houses along streets within the old district were turned into small unit households (stores, primary schools, theaters, cinemas, clinics, etc.) to serve local residents. But the major body of the unit households is located in the middle zone, between the old urban district and the suburbs. This zone for unit households was established in the past 40 years mainly by migrants (both Han and Tibetans) from other regions, and was not the result of migration within the city.

In 1975 the city of Lhasa was expanded to 18 square kilometers with a total population reaching 100,000. It expanded to 25 square kilometers in 1980 and the space between Potala and Jokhang became permeated with residential houses. The urban area of Lhasa reached 54.9 square kilometers in 2005, 18 times what it was in 1950. The total area on which there is some construction reached three million square meters, 14.3 times what it was in 1950. The population reached about 140,000 in 1990 and 181,991 in 2007 (Fu Chonglan, 1994: 309–313, SBT, 2008: 36). Accurately counted construction areas totaled 791,976 square meters in 2004, of which 58 percent was residential housing (Statistical Bureau of Lhasa, 2005: 91, 79).

Visitors to Lhasa today can easily distinguish the new urban area from the old urban district simply by appearance. The modern-style buildings in the new urban areas are very different from Tibetan stone houses in the old urban district. One can easily discern the boundary between the two from the top of the Potala Palace. Native Tibetans and pilgrims might enjoy the modern services they now

have access to but they are unhappy about the changes in the appearance of their "Holy City." Anthropologists and tourists might be disappointed by these changes, preferring traditional Lhasa and not the accoutrements of modernization. In recent years authorities have repaired the Potala Palace and major monasteries by providing financial subsidies from the central government, and careful efforts are being made to maintain the original appearance.

In the 1960s major administrative institutions were constructed in a middle zone outside the old central area. First, it has been the tradition in Lhasa to set up administrative institutions in the middle zone. Those office buildings and army camps were always kept some distance from the residential and commercial areas to keep a low profile and to avoid any possible accidents. It was very different from other Chinese cities where administrative headquarters were always in the center of cities.

Second, the old urban district has become very crowded. To build office buildings in the outer zone around the old urban area was much cheaper than buying land in the central area and building new houses there. That would have led to considerable outlays because, in addition to the costs of purchasing and construction, residents in those old houses had to be moved and resettled at government expense. That would have caused tension between the government and native residents. It made more sense, psychologically and financially, to make the most of empty monasteries and land not being used.

Third, to build new houses and buildings in the zone outside the old urban district made construction of facilities, water supply, sewers, electricity, communications, and streets much easier and cheaper. It was believed the modern buildings along the new streets would give the old city a modern face of which city authorities and the builders could be very proud.

The fourth reason was that almost all the Han residents in Lhasa arrived after 1951.[16] From 1911 to 1951, only a very small number of Han officials and merchants remained in Lhasa. Most of the Han who arrived after 1951 had never been in Tibet before, and knew nothing about the Tibetan language or the traditional culture. This disparity resulted in a social distance and reduced the eagerness of Han and native Tibetans to have more interaction than was necessary and led to their desire to live separately.

A fifth reason was that a major proportion of the Han in these unit households were actually circular government employees whose job appointments had been arranged by the government. Some of them worked in Tibet for only three years, some for five. Their tenure depended on which year they were sent to Tibet. Unit households and their apartment buildings were designed for these sojourners as offices and dormitories. It was easier in terms of construction and management to situate these buildings in a separate zone outside the old urban district. Moreover, the short-term work expectations of these Han employees gave them little incentive to learn Tibetan and come into contact with the local Tibetans.

From 1979 to 1981, the TAR government devised a city development plan for 1980 to 2000 that was approved by the central government in 1983. One of the six parts of the plan called for the "reconstruction of the old urban sector." But in subsequent years it turned into "repairing, or rebuilding, the old houses" with increased population density because of high fertility among the Tibetans.

Another part of the plan called for the "construction of new residential quarters" outside the central urban areas. This plan included two "quarters" built and managed by the city government with another 13 "quarters" built and managed by unit households. According to the 1990 Census, the total population of "*Tuan jie* New Village" (a city managed quarter) was 1,757, and 77.6 percent of whom were Tibetans, 18.7 percent Han and 3.7 percent from other groups; the total population of "*Tashi* New Village" (another city managed quarter) was 857 with 86.9 percent Tibetans. Other quarters also had a high percentage of Tibetans (e.g. Tibetans comprised 66 percent of the 1,212 population in "*Naqen* Retirement Quarter"). It is worth making a couple of points about these new areas: (a) most of these quarters are in the middle zone; they are actually an expansion of the unit household areas, not an expansion of the old urban district, (b) most residents who moved into these quarters were retired government employees, and a large proportion of them were Tibetans who originally came from outside Lhasa while all Han retirees returned to their home provinces upon retirement. Therefore, these new areas have only minimally improved social contact between native Tibetan and Han residents.

A new phenomenon is that the old urban area of Lhasa now has become the center of tourism and services. Native Tibetans are moving out of this area and rent their houses and apartments to temporary migrants. About 17 percent and 27.4 percent of total rented houses in urban Lhasa are situated in Barkor and Tromsig Khang respectively. This replacement of residents became more obvious following the rapid development of tourism since the Qinghai-Tibetan railway was completed in 2006. But this new trend does not change the basic pattern of residential ethnic segregation.

Following the large infrastructure construction projects funded by the central government and other provinces in the past two decades, urban Lhasa has become a modern city. Lhasa has modern buildings, roads, hotels, restaurants and shops, like cities in Han regions. For example, city road area per capita in Lhasa increased from seven square meters in 1990 to 18 square meters in 2005; the length of sewage pipe per capita in Lhasa increased from 0.51 meters in 1990 to 1.39 meters in 2000 (Ma Rong and Tanzen Lhundup, 2006: 166). The government hopes such progress will demonstrate its efforts in helping Tibet modernize. But investment in infrastructure in rural areas and other towns lags far behind Lhasa. Sharp differences between Lhasa and rural areas as well as Lhasa and county towns might lead farmers/herdsmen and residents in small towns to feel excluded or abandoned. As discussed in Chapter 7, the most serious urban-rural gap in China is in the TAR. Lhasa residents, both Han

and Tibetans, moved to the top in the hierarchy of social stratification. Besides, it should be asked how Tibetan farmers and herdsmen feel about the rapid changes in their holy city and its new appearance. These issues have to be studied very carefully in the future.

As mentioned before, a significant characteristic of residential patterns in Lhasa is its unique unit household system. These unit households include all employees of the unit, not just those who are unmarried and live in dormitories. Indeed, almost all government employees live in dormitories apart from those recruited from the old urban district who prefer to continue living there although they are eligible for space in the unit's dormitories. In 1990 six units had populations above 1,000. For example, Tibet University, as a unit household, had 1,809 associates. The different registration systems make any transfer between individual household and unit households very difficult, resulting in the current segregated patterns.

Conclusion

We have observed a pattern of both residential and school segregation between Han and Tibetans in Lhasa. Ethnic residential segregation exists among both permanent and temporary residents. The residents of Lhasa live in separated zones according to their residential registration status. Unit households in which most Han live are actually separated from native Tibetan residents. Within these unit households there is more in-depth segregation as indicated by the index of dissimilarity.

It seems that residential patterns in Lhasa emerged through an evolutionary process rather than by government decree. There are some understandable reasons for such a phenomenon. Compared with other factors (cost and convenience), planners ignored the impact of their construction plans on ethnic interaction. This is common in countries where people are more concerned about the physical design and appearance of cities rather than the conditions that encourage social communication among various ethnic, religious, racial and other groups.

One special factor in the Han-Tibetan relationship in Lhasa is that most Han went to Tibet after 1951 and then only for a fixed period of time. Such arrangements meant that most Han had no incentives to make social contact with Tibetans. They hesitated to learn the Tibetan language and culture, maintained their own customs by living in separate residential quarters, and were eager to return to their places of origin. Such attitudes also had a negative impact on Tibetans' opinions of the Han. In this respect Tibet is quite different from other minority regions such as Inner Mongolia, where there are fewer temporary migrants and Han have been settled for centuries. The relationship between Mongolians and Han in Inner Mongolia is reported to be generally good. They became friends, lived in the same villages or neighborhoods and intermarried (some 15 percent of all married Mongolians)

(Song Naigong, 1987; Ma and Pan, 1988 and 1989). The Han population of Inner Mongolia reached 79 percent of the total in 2000, a situation far different from the overwhelmingly Tibetan population of the TAR.

Housing policy in China has had an impact on residential patterns in Lhasa. Since 1949, the Chinese government has made limited investments in housing construction compared with industrial production. Furthermore, with regard to housing funds, government policy has favored government institutions and their employees. City construction bureaus, which repair and rebuild houses in old urban areas and rent them to residents, have also received only limited funds. In 1988 funds for housing construction in the old urban district in Lhasa comprised only 0.6 percent of the total budget of the Tibet Autonomous Region. In contrast, government institutions (unit households) have much more funds to build offices and apartment buildings. Such differences increased the gaps in housing and in living standards between the residents of unit households (where most Han live) and the residents of the old urban district (where native Tibetans live).

We found that the residential patterns of temporary migrants reinforced ethnic segregation in Lhasa. The segregation was not imposed by urban planners but by insufficient planning. Strong or weak urban planning and housing regulations may have different effects, positive or negative, on ethnic segregation in cities.

A certain level of school segregation is partly the result of residential segregation in Lhasa, as is the case in other countries. Language differences are an important factor separating Han from Tibetan students in schools and classes. In recent years the government has re-emphasized using Tibetan as the language of instruction in schools for Tibetan children, and even organized Tibetan students into separate classes to guarantee that they studied in Tibetan. Therefore, the trend of Han and Tibetan students studying in different schools, or at least in different classes, will continue and even be bolstered.

It seems that residential and school patterns in Lhasa have contributed to the lack of interaction between Han and Tibetan residents and their children. During our research in Lhasa, I felt that Tibetan residents in the old urban district had limited knowledge about the Han who were living in the same city. I was told that Tibetans, especially women and the aged, had no occasion to come into contact with the Han in their daily lives. I found that there were many misunderstandings about traditional Tibetan culture and customs among the Han as well. Returning to the assimilation model of Gordon, acculturation (language learning) did take place in Lhasa through the school system and there was a small number of intermarriages. Residential patterns, to a large extent, showed a clear ethnic segregation. Many native urban Tibetans who now are mainly employees of the government while Han cadres who went to Lhasa to serve their terms. Because they work together in the same units, they usually get along as colleagues. But there is serious competition between Han temporary migrants and Tibetan migrants in job markets and for

other opportunities. This competition has become a major cause of ethnic tension and conflict in this city.

Partly because of the complicated relationships between Tibetan and Han regions in the past, and partly because of different cultural and religious traditions, the process of social contact and ethnic integration in Tibet has been stymied. Residential patterns in Lhasa are only a facet of the difficulties encountered.

Notes

Chapter 1 Introduction

1. There were no solid bridges in Tibet before the 1950s; people crossed rivers using rope bridges or animal-skin rafts. The 13th Dalai Lama imported two cars from India in 1928 for his personal use in urban Lhasa. The British agency in Gyantse imported three trucks in 1930. Because of poor road conditions the trucks were used only two or three times, between Gyantse and Pagri. Around 1931, there was a small mint and a gun factory in Lhasa with about 120 employees. A small hydroelectric station was closed soon after it began operating in the early 1930s (Tanzen and Zhang Xiangming, 1991b: 87–88, 136).
2. The administrative structure in China is: central government (Beijing), province or autonomous region, prefecture (in the TAR that also means the Lhasa Urban District), county, *xiang* (town) and administrative village (which could include one or several natural villages depending on population).
3. The English version of this article was published in *JIATS* in 2008. (*JIATS*, No. 4, December 2008), THL #T5561, 42 pp. (http://www.jiats.org/ or http://www.thlib.org/collections/texts/jiats/)
4. Professor Fei Xiaotong (Fei Tsiao-tung, 1910–2005) was an internationally acclaimed sociologist and anthropologist. He received his Ph.D under the guidance of Professor Bronislaw Malinowski at the London School of Economics in 1938. His doctoral dissertation, *Peasant Life in China*, was published by Routledge Press in 1939 with a preface written by Malinowski. He returned to China in 1938 during the war against the Japanese and until the 1950s taught at Yunnan University, Qinghua University and the Central College of Minority Nationalities. He was criticized as one of the six "famous rightists" in 1957 and suffered a great deal during the Cultural Revolution. He became active again in the late 1970s when Deng Xiaoping came to power. He served in many important positions, such as Chairman of the Democratic League (a non-communist political party), Vice-Chairman of the National Council of Political Consultation and Vice-Chairman of the National People's Congress (China's Parliament). He established the Institute of Sociology and Anthropology (ISA) at Peking University in 1985, serving as its first Director. He remained an academic supervisor and its Honorary Director of ISA until he passed away in 2005.

5. Lhasa City is an administrative unit at the prefectural level with eight counties to administer, including the Lhasa Urban District, which is the equivalent of a county-level administrative unit. The seven prefectures in the TAR are: Lhasa, Shigatse, Lhoka, Chamdo, Nying Chi, Naqchu and Ngari.
6. In 1987 the administration of rural areas was in transition ("abolishing districts and establishing *xiang*"); preparation work for the transition provided the most recent and reliable data for those newly established *xiang*.
7. Residential registration files in rural China record residential location (e.g. from the east end to the west in each row of houses in a rural village or an urban street) or former productive teams (the households of one team usually live next to each other). From previous research experience in Inner Mongolia, we found that the ideal method of selecting samples was by equidistance (Ma, 1987). The sampling procedures were designed and conducted by Professor Hao Hongsheng of the People's University of China. He received his MA degree at the University of Michigan and was a student of Professor Leslie Kish, a leading American sampling expert.
8. Because these unit households were organized based on "work units" (*danwei*) (Li and Wang, 1996), the number of residents within each unit household may range from fewer than 10 to several thousands depending on the nature and size of the work unit. The largest units in Lhasa were transportation companies that had more than 4,000 employees, mainly truck drivers. The Han residents registered in unit households were mainly the government-arranged temporary migrants who worked in the TAR for a service term only (usually three years, sometime eight years in recent arrangements).

Chapter 2 The Geographic Distribution and Changes in the Tibetan Population of China

1. When the Dalai Lama negotiated with the central government of China in 1982, one important request was that any solution must include that the Tibetan-inhabited areas in Qinghai, Sichuan and Yunnan be unified into one "Great Tibet." The speech the Dalai Lama made at the European Parliament in 1988 stated that Tibet and the Tibetan-inhabited areas in Qinghai, Gansu, Sichuan and Yunnan should become an autonomous, democratic political body (Goldstein, 1997).
2. In marginal areas where Tibetans and other ethnic groups lived together, the identity of some local tribes is still being debated. For example, a group in Jiarong (Sichuan) was recognized by the government as "White Horse Tibetans," although they prefer to become an independent ethnic group or join the Qiang group. There were 734,438 residents in China who remained "unrecognized people" in the 2000 census.
3. "In 1800 the number of Putia (Tibetans who lived in Tibet and other countries) probably did not exceed 6 million, and the population under direct management of the Lhasa government was certainly much lower than 4 million (Fletcher, 1978:96)."
4. Hugh Richardson estimated a Tibetan population of about 300,000 during this period (Richardson, 1962:4).
5. The average annual growth rate was 1.9 percent for the total population of the TAR according to the registration numbers in 1964 and 1982.
6. When a couple has their first child and decides to have no more, they can register with their work unit for a "one child certificate." This status will provide some benefits to the

couple, including a monthly subsidy, reimbursement for some healthcare expenses for the child, priority for school enrollment for the child, priorities in housing assignments, even job promotions and vacations for the couple, etc. These benefits vary by cities and work units.

Chapter 3 The Han Population in the Tibetan-inhabited Area

1. This is cited from the speech of the Dalai Lama to the United States Congress in 1988.
2. The Han population discussed in this book excludes military forces because no data are available. Estimates of the military force in Tibet vary from between 14,000 and 750,000 (Grunfeld, 1996: 252).
3. *Asia Watch* also pointed out that the boundaries claimed by Tibetans in exile are problematic, "their Amdo Province includes the whole Qinghai Province . . . where in some areas Chinese have lived for several centuries (*Asia Watch*, 1988a: 42)."
4. In his book *Tibet and the Tibetans*, Shen Zong-lien described the Han shops in Lhasa and presented his photos with Han merchants (Shen Tsung-lien and Liu Shengqi, 2006: 209).
5. The Agricultural Office in Lhasa administered all people who otherwise did not have lords (e.g., runaway serfs). They might be farmers or in other activities.
6. Since the census data for age groups and occupations were provided only for provinces and autonomous regions, the comparisons of age and occupations between Han and Tibetans in other Tibetan-inhabited areas by prefecture or county are not available.
7. From the 1950s to 1970s, they worked in the TAR for indeterminate periods of time. In the 1980s people were sent to TAR to work for three-to-five-year periods.

Chapter 4 Analysis of the Population Structure in the Tibetan Autonomous Region

1. For example, if a large transportation team with hundreds of trucks was managed by the transportation bureau and then transferred to a construction company, all workers (truck drivers) would change their industrial category from transportation to construction.
2. Permanent residents in Lhasa are registered in two categories: individual resident household and collective unit household. The registration of these two categories of residents was under two separate secretaries at a local public security station. During our survey in 1988, we found that because the secretary in charge of registration of individual residents went on vacation, several thousands residents were not included in that station's statistical report for that year. Therefore, these residents were overlooked in population statistics from the local to the TAR and national levels.
3. In general, the birth quota (citizens must obtain a certificate before the birth of their child) is issued by the mother's work unit or residential committee, not the father's. The quota system is an important measure of China's family-planning program.
4. One important point needs our attention. In Chinese official statistics of urban population, some villages (rural population) within city-administration boundaries were included as part of the urban population. This standard has misled people's assessment of China's urbanization levels for a long time, especially with the "city managing counties system," which changed the population of these counties overnight from rural to urban when the administrative order went into effect. In order to overcome this confusion, the 1990

and 2000 censuses had two standards in measuring urban population; (a) counting all population (including rural) within urban administration (county towns, cities); (b) only counting the urban population under urban residential committees living in urban areas. The second standard represents real urban residents. The data cited above for 1990 and 2000 censuses are calculated by the second standard.

5. For example, there were 3.0–3.5 million temporary migrants in Beijing, which had about 12.8 million permanent residents in urban areas in 2005.
6. In a survey conducted in the late 1990s, it was found that the arable land per capita was fell by 19.9 percent from 1981 to 1996 in rural TAR mainly because of high fertility and limited land resources (Goldstein et al., 2006: 206).
7. According to government transportation records, 848,790 tons of grain were delivered to the TAR from 1982 to 1992. If the TAR's population during that period is estimated at 2 million, 53 kg grain per capita were imported into the TAR annually, while 78 percent of the total labor force of the TAR was engaged in agriculture in 1992. The statistical yearbook of the TAR has not released the transportation records of imports and exports or by items in recent years.
8. My personal experience indicates that free health care is provided in town hospitals. I was ill and visited a hospital in Gyantse in 1988. The doctor asked whether I was a resident of the TAR and charged me a fee because I wasn't. A receipt wasn't issued; the hospital had no need for them because local patients do not pay for health care service and few outsiders like me visit hospitals in small towns.

Chapter 5 Migration in the Tibetan Autonomous Region

1. http://www/xizang-zhiye.com/gh/ex/lwzhengfu/tcv.html.
2. The structure of China's administration system is as follows: the central government, provincial (municipality, autonomous region) government, prefectural (special cities at prefectural level) government, county (banner) government, *xiang* (town) government. Under the management of *xiang* governments, there are "administrative villages" (the formal brigades) and "villagers' groups" (the formal productive teams). "Natural village" refers to a residential gathering with an obvious distance from other villages that might have several thousand residents or only several households. "Administrative village" is an official unit and may only cover one big natural village in high-density plains, or several natural villages in low-density mountain areas.
3. It does not mean that in-migration really fell in the 1980s. The new in-migrants, both Han and Tibetans, went to live in unit households under the new system, and did not move into the crowded old urban areas with their poor infrastructure and services.
4. The 2000 census does not provide data showing the rural-urban occupational breakdown.
5. Pearson Correlation is a common method in social statistics to evaluate the relationship between two variables, such as education and income. A positive correlation coefficient means that when one variable's value increases, so too does the value of the other value. A negative coefficient means the opposite. The larger the coefficient, the closer the relationship is between the two variables.
6. Regression Analysis is a method to analyze the relationship between a dependent variable and several independent variables. The method is used to assess, for example, to what extent independent variables, such as age, education and ethnic status, affect a dependent variable such as income.

Chapter 6 Economic Patterns and Transitions in the Tibetan Autonomous Region

1. According to the 2000 census, the total population of ethnic Tibetans in the PRC was 5.42 million. Of these, 2.99 million (55.3 percent) lived outside the TAR (PCOSC, 2002a: 20).
2. Mostly were from wool and leather. Cotton clothing were largely imports.
3. "Nearly half of Tibet's trade with India was carried on Siliguri-Kalimpong road (through Yatung) (Karan, 1976: 43)."
4. The value of the rupee increased in 1900: 1 (British India) Rupee = 0.196 US gold dollar in 1897, (versus 0.207 in both 1898 and 1899) and 0.324 US gold dollar in 1900 (also in 1903) *(The World Almanac and Encyclopedia 1898* and volumes of the following years). The increasing value of the rupee shows a more significant growth of Tibet-India trade during the period.
5. "Khe" is a very special unit to measure both the weight and the area of cultivated land in Tibet. One Khe is equal to 14 kg in weight, or a piece of cultivated land on that 14 kg barley or wheat may sow. Because land quality varies, the area of "Khe" in land measuring is also varying. It is roughly equal to one mu (Tanzen and Zhang Xiangmin, 1991a: 85).
6. Mahayana Buddhism is different from Tibetan Lamaism (Karan, 1976: 65–67).
7. There were several hundred Hui in Lhasa before 1952, living in a neighborhood (He-Ba-Lin) near the Jokhang. A study reported that about 1,000 Hui went into exile in 1959 (Fang Jianchang, 1988: 109–112).
8. There were also some Han artisans and gardeners (planting vegetables) in Tibet (Bell, 1928: 31), but no data on their numbers.
9. It was estimated that the total number of Tibetan refugees who went into exile in India, Nepal and Bhutan in 1959 was 50,000 to 55,000, including 5,000 to 6,000 monks (Grunfeld, 1987: 187). Another estimate suggested a total of 91,000 Tibetans in exile in 1959, 74,000 from the TAR (Zhang Tianlu, 1989: 10).
10. According to the definition in the SBC: "net income" of rural residents = total annual income — productive expense — taxes — depreciation of fixed productive assets — contract contribution — survey subsidy (SBC, 1989: 759).

Chapter 7 Income and Consumption of Rural and Urban Residents in the Tibetan Autonomous Region

1. The Lhasa Urban District is an administrative unit at the county level. It included some 11 *xiang* in its suburbs in 1982, which, by 1988, were consolidated into four. The *xiang* include villages where peasants are registered as agricultural residents. The same situation exists in Shigatse City and other towns in the TAR, as well as some other parts of China.
2. From 1965 to 1990, the total percentage of the non-agricultural population increased from 16.5 percent to 19.4 percent in China as a whole, while it increased from 9.7 percent to 13.7 percent in the TAR (SBC, 1991: 82; SBT, 1991: 125). Since these numbers caused a lot of confusion among western scholars, the 1990 census applied two criteria to measure China's urban population. The first criterion followed the administrative boundaries; the second criterion only tallied the residents registered in urban residential committees.
3. I interviewed a nun who had resumed secular life in her sixties. Her room was looked wretched and she really did not have any stable income, living on occasional donations. Her eyes filled with tears when we asked about her income. On another day, during our interviews a Tibetan who owned a large truck and tractor repair shop told me that he earned 35,000 yuan in the previous year. They represented extremes of poor and rich in Lhasa.

4. The impact of the new system in pastoral areas in western Tibet is best described in Goldstein and Beall (1990: 161–162).
5. Private transportation businesses numbered 1,928 in rural areas in the TAR in 1988 with capital of 18.1 million yuan. The total value of their businesses was 31.2 million yuan (Zhuang Yongfu, 1990: 14).
6. These two standards were calculated based on total power and total tractor numbers in the TAR in the same year.
7. In Han regions, when the husband dies and leaves a son above the age of 18, it is common that the son is registered as the household head, not the mother.

Chapter 8 Tibetan Spouse Selection and Marriage

1. For studies of polyandry, there is other literature focusing on local communities in the Himalayan regions outside Tibet that provided helpful insights into understanding Tibetan marriages (Prince Peter, 1963; Parmar, 1975).
2. *Shika* (estate or manor) was the basic economic and administrative organization in Tibet before 1959. There were three kinds of *shika*: those maintained by an aristocratic family, by a monastery and under the direct management of the *Kashag* government. For example, in Dongkar *dzong* in 1956, 72 *shika* could be classified, with 82 percent belonging to monasteries, 12 percent to aristocratic families and six percent to the government. (TSHSSEG, 1987a: 3).
3. "Sororal polygyny (it is a marriage type) in which a man marries two or more sisters (Goode, 1982: 94)."
4. The socio-economic hypothesis was supported by Tibetans who practiced polyandry. For example, Tashi Tsering, in describing his two fathers and the family, said, "We saw this custom as an effective way to conserve resources and enhance the material well-being of the family. Polyandry . . . prevents fragmentation of the family's land across generations (Goldstein, et. al., 1999: 7)."
5. Other studies believed that marriages rules in Tibetans "prohibit descendants of paternal sides forever, and allow descendants of maternal sides to marry after seven generations (Lu Liandi, 1986: 194)."
6. For Tuoji *shika* (in Lazi County), "*Tre-ba* marriages were mainly decided by their parents . . . while there was much looser parental control about spouse-selection among the *Du-jung* (TSHSSEG, 1989c: 112)." For Niu *shika* (Shigatse), "the marriages of aristocrats or rich *Tre-ba* were basically arranged by their parents, the young people of poor *Tre-ba* and *Du-jung* families had more freedom in their marriages (TSHSSEG, 1991: 397)." For the Lhoma Rangshog Tribe (Nagchu *dzong*), "Parents usually had a strong voice in selecting spouse for their children, but there were relatively more marriages based on the decision of young people themselves among the poor (TSHSSEG, 1989a: 49)."
7. "*Qian-dou* (*phyi-thab* in Latin)" is a kind of serf who has left his "lord" and lived in other places. Their status is similar to that of the "*Du-jung*." They usually had some skills but no lands assigned from their lords ("*Tre-gang*" or "*Man-gang*"). They had to pay "tax" to their lords and rent to the house owners, but did not have to provide free work to their lords.
8. For example, there might be four methods for spouse-selection: parents make the decision, self-selection but must have parental approval, self-selection and joint decision by parents and their children (Herter, 1981: 147).

9. Other channels include: (a) job transfer of government employees, (b) family reunion (for separated couples to move and live together or old parents who move and live with adult children), (c) job distribution of college graduates and demobilized military officials, and (d) government resettlement projects (students sent to the countryside during the Cultural Revolution, demobilized soldiers in military corps, migration projects for farmers who suffered from natural disasters).
10. If there were more than one couple in the household and one of them intermarried, this household was classified as a "united household." Therefore, our assumption is a rough estimate. According to the 1990 census reports, 72 percent of the united households (1,900 households) had from two to four persons, and another 11.7 percent (309 households) had five persons. A united household with more than five people in it comprised 16.3 percent of the total (COT, 1992a: 180). We may assume that households of two to five individuals were "one-couple households" since three or more children per couple was very common in the TAR. Therefore, "one couple per one household" is the situation in most cases.
11. For detailed information about property distribution, who kept the children, and the methods for deciding who was responsible for children's expenses, please refer to *Survey Reports of Social and Historical Studies in Tibet* Volumes 3 and 5 (TSHSSEG, 1989a: 50, 228; 1989c: 115, 324).
12. "Lay officials were normally recruited from the estate-holding, hereditary, lay aristocracy, which consisted of 150 to 200 families. These were differentiated internally into a small group of about 30 higher-status families, known as *Depon Mitra*, and about 120 to 170 lower or 'common' aristocracy families (Goldstein, 1989: 6)." Other studies classified Tibetan nobles into three groups: six *Yab-gzhis* families (families of the Dalai Lamas), five senior noble families (*Depon*) and about 200 common noble families (those who own land, *Geba*) (Petech, 1973: 18). Another study classified the hierarchy of the Tibetan aristocracy as four groups: six *Yab-gzhis* families, five *sDe-dpon* families, about 30 *Mi-drag* families and around 200 ordinary aristocrat families (Tsering Yangdzom, 2006: 26–27).

Chapter 9 Educational Development in the Tibet Autonomous Region

1. *Si-shu* are traditional private schools designed to give students a very rudimentary education. They usually have only one teacher and the number of the students can range from several to more than 40. Historically, the teaching content has been reading, writing and the study of Confucian classics.
2. The list included a total of 23 Tibetan students who had studied in western-style schools and also their names, ages, places where they studied, what they studied and positions at the time. Among these students, four went to England, six to India, 10 to Darjeeling or English school in Gyantse, and three visited England or India for a short time (Wu Zhongxin, 1953: 92–94).
3. "The British Indian government established two English schools for Tibetan aristocratic youth in Gyantse and Yatung in the 1920s. They were closed within three years. Another new English school was established in 1945 but closed in three months (Li Yankai, 1989: 351)."
4. "According to the monastery's regulations, monks would not pay tuition to learn Buddhist scriptures and would be provided food, clothing and a place to sleep. These expenses were covered by the monastery's income as well as the subsidies from the local government."

This book described the major monasteries for *Geshe* training and their curriculum (Yang Shengying, 1989: 149–150; Li Yankai, 1989: 353–355; Zhu Jielin, 1989: 395–413).

5. There are several estimates of the number of students in the First Primary School of Lhasa. One estimate is that "it reached about 200 at the most (Editorial Group of Education in Tibet, 1989: 130)." Others suggested that "the year 1946 was the peak for this school . . . with about 300 students, there were four generations (or about 200) of graduates who completed the six year program (Tanzen and Zhang Xiangming, 1991b: 301)." Another article said that from 1938 to July of 1949, "only three generations graduated from this school with a total of eight graduates (Yu Yonggui, 1994: 134)." Another report noted that "this school only recruited students with Han blood (Tibet Research Group of Education Study Project of Ethnic Minorities, 1989: 27)." This is different from other studies, since most of them claimed the presence of some Hui and Tibetan students although their numbers were relatively small. Besides, "the Muslim mosque established a Hui Muslim primary school in Lhasa in 1910 . . . The courses included the Arabic Koran, Urdu, Tibetan, and Chinese. It had about 110 students. When the First Primary School was established in 1938, all students from this Muslim school transferred to the new school (Tanzen and Zhang Xiangming, 1991b: 302)."
6. There were about 60 *Geshe* degrees of various kinds offered each year and more than 1,000 monks could apply to take the exams (Sun Ruoqiong, 1990: 44). For more details about monastic education, see "On Monastic Education in Tibet (Zhang Husheng, 1990)."
7. According to estimates by Wu Zhongxin, the annual number of students who graduated from *Si-shu* but did not go on to the *Tsigang* school was 30 to 40. These were "intellectuals" with some education but who remained outside government employment. They usually worked for large estate owners (Wu Zhongxin, 1953: 92).
8. Melvyn Goldstein suggested four levels for the three major monasteries: *tratsang*, *khamtsen*, *mitsen* and *shagtsang* (1989: 30).
9. The "Agreement on Measures for the Peaceful Liberation of Tibet" was signed by the representatives of the Dalai Lama's government and the central government on May 23, 1951 (English text refers Karan, 1976: 89–91). Before the agreement was signed, the Chamdo Primary School was established in March, 1951. In 1952 there were 12 primary schools in the Chamdo region under the government's management with a total of 600 students (Dorji Tseden, 1991: 71).
10. "Led by Jungnay of Drepung monastery's Gyeba college and by the abbot of Sera Che college, a meeting regarding the school was held in each monastic college. These discussions produced an agreement that if the (*Kashag*) government was unwilling to close the school on its own, the *dobdo* monks of the three major monasteries would be sent en masse to close the school by force (Goldstein, 1989a: 424)." From this description, we can see how seriously the monasteries reacted to the modern schools.
11. There are different opinions about the consequences of this policy. One author reported that "this reduction meant that some children could not attend school any more and had to leave . . . A huge price was paid, and these schools in the TAR have not recovered since then (Yu Yonggui, et al, 1994: 142–143)."
12. Those expenses can be divided into three parts. The first was related to the construction of dormitories and classroom buildings and this part was provided by the central government (e.g. 9.5 million yuan and 19.5 million yuan in 1985 and 1986 respectively). The second

part pertained to grants for running the classes (50,000 yuan for 1 class annually) and supporting the students (120 yuan for stationery, 100 yuan for clothing, 36 yuan for health care, 50 yuan vocation fee, 30 yuan for heating per capita annually plus 36 yuan per capita as a monthly subsidy in 1985). This part was provided by the TAR government. The third part was the grant provided by host provinces to meet the construction budget shortage (it varied by province from 0.15 million yuan in Hunan to 1.2 million yuan in Shaanxi in 1985) and to subsidize the daily needs of students (that varied from 150,000 yuan in Zhejiang to 650,000 yuan in Tianjin in 1985). The standards of the above items were raised in the following years according to inflation and the financial situation of the government. The government provided a total of 66.75 million yuan to support inland "Tibetan Classes" from 1985 to 1989 (39.95 million by the central government and 26.8 million by provincial governments (Editorial Committee of TAR Chronicles, 2005: 362–364).

13. There were 9,933 Tibetan students in middle schools under this "three guarantees" program in 1992 (Editorial Group of *Educational Yearbook of China*, 1993: 654). In 1981 the TAR government decided that all ethnic minority students in high schools would receive a stipend. In 1982 the government decided that for middle and primary schools all minority students who lived in the school dormitories would received a stipend while only 80 percent of the minority students who lived at home would receive a stipend (Tanzen and Zhang Xiangming, 1991b: 319). In 1995 the TAR government detailed the "target groups" eligible for the "three guarantees" program: all students in boarding schools in pastoral areas, students whose parents both were farmers or herdsmen. If one of the parents was a farmer or herdsman, 50 percent of the grant was issued. The "assistant grant" was offered to: students who were not in boarding primary schools but lived in border areas, students who were from poor farmer/herdsman families and not in boarding middle school, students who had at least one parent who was not a government cadre/employee in urban areas (Zhou Wei, 2003: 258). The detailed implementation standards of the "three guarantees" program and school tuitions in the TAR were introduced by the *TAR Chronicles* (Editorial Committee of the TAR Chronicles, 2005: 315–318; 310–312).
14. "Literacy" in the TAR was measured by ethnic groups. For Tibetans, the standard is "can read and write general Tibetan words, can read Tibetan newspapers and documents, can write letters and short papers, and can manage simple accounting." For Han, the standard is "can recognize and write over 1,500 Chinese Putonghua words, can read newspapers and papers, can write letters and short papers in Chinese Putonghua, and can manage simple accounting (Editorial Committee of the TAR Chronicles, 2005: 536)."
15. In middle schools, "after learning Chinese for only three years (in primary school), they had to compete against (Han) children who were using their native tongue (Bass, 1990: 80)."
16. The codes of variables in Table 9.15 are:
    "Educational achievement": illiterate (1), primary school (2), junior middle school (3), high school (4), professional high school (5), college and above (6).
    "Gender": male (1), female (2).
    "Place of birth": within county (1), in other county within prefecture (2), in other prefecture within the TAR (3), other province (4).
    "Registration": non-agricultural (1), agricultural (2), pastoral (3).
    "Religion": Gelugpa sect (1), Nyingmapa sect (2), Kargyu sect (3), Sakya sect (4), Bon (5), Islam (6), other religions (7), no religion (8).

Chapter 10 Residential Patterns and Social Contacts between Han and Tibetan Residents in Urban Lhasa

1. This number does not include military personnel.
2. In the Chinese urban system (city-town-rural), *xiang* is classified as "rural" although the population size and extent of residential concentration of some sites where the *xiang* government is located are actually quite large, especially in coastal areas (Ma Rong, 1990).
3. For example, the ratio of Group A and Group B in a city is 20: 80, and their distribution is uneven among city districts. If the calculated Index of Dissimilarity (ID) is 32, that means 32 percent of Group A or Group B will need to move from their current district into other districts where the size of their group is too small.
4. If the counting unit is too small to use a household as the unit in an extreme case, the result would be complete segregation. If the counting unit is too large, using the city as the unit in an extreme case, the result would be complete integration.
5. The calculation formula of ID in this study is:

$$ID = 1 / 2 \sum_{i=1}^{n} | t_i / T - h_i / H |.$$

Here t_i and h_i are the number of Tibetans and Han in #1 unit household; T and H are the total Tibetans and Han within the relative district office.
6. According to the 1990 Census, Drepung Monastery had 775 monks (765 were Tibetans and 10 were Hui); all the monks in the other major monasteries in Lhasa were Tibetans (609 in Sera, 107 in Gandan, 106 in Qusang and 93 in the *Jokhang*).
7. For example, 60 employees of the Barkor Primary school were Tibetans, 125 out of 126 employees of the Jebum Gang Primary school were Tibetans and one was Hui; among 25 cadres of the Barkor District Office 24 were Tibetans and one was Hui; among 31 policemen of the Jebum Gang Public Security Station, 30 were Tibetans and one was Han.
8. In 1959 there were only two middle schools in Tibet; in 1965 the number of middle schools increased to four and in 1979 to 55 (Lhapa Phuntso, 1984: 518–522).
9. Using incomplete registration records, there were 52,800 temporary migrants in Tibet from other provinces from June to August 1985. Among them 51 percent were from Sichuan, four percent (1850) from Jiangsu and three percent (1670) from Fujian (Liu Rui, 1988: 153). Our 2005 Lhasa survey found that among the temporary migrants, 30.3 percent were from Sichuan, 24.3 percent from Gansu and 13.8 percent from other areas within the TAR.
10. In the 1980s these stores were rented to and registered in the names of relatives who had permanent jobs in work units in Lhasa so the government could be sure to find them for tax-collection purposes and to maintain the condition of these properties.
11. A small group of Hui businessmen are from Gansu Province. They usually live with relatives or friends in the Hui neighborhood in the Wabalin Resident Committee under the Kyire District Office.
12. The work of repairing and rebuilding Tibetan-style houses in the old urban district is done by local Tibetan construction teams that are collective enterprises and usually managed by local authorities.

13. These schools are under the guidance of the City Education Bureau when it comes to their curricula and examinations, but they manage their own employment, finance and operations.
14. The three famous monasteries (Drepung, Sera, and Ganden) are in the suburbs, about 5.5, 3 and 20 miles away from the city respectively (Goldstein, 1989a: 24).
15. This is a traditional use of empty monasteries, as with Tengyeling Monastery, which was destroyed by Tibetan government forces after it sided with the central government in 1912. The remains of its buildings were used as a post office in the 1930s (Chapman, 1940: 151).
16. In 1951 the "Agreement on Measures for the Peaceful Liberation of Tibet" was signed by delegates from both the central government and the *Kashag* government of Tibet (For the English version of this Agreement, cf. Karan, 1976: 89–91).

References

References (in Chinese):

Almanac of China's Population (1985),《中国人口年鉴》（1985）Beijing: 中国社会科学出版社 [Chinese Press of Social Sciences].

Bai Tao 白涛, ed. 1995,《西藏农业结构与粮食流通》[*Agricultural Structure and Grain Circulation in Tibet*], Beijing: 中国藏学出版社 [China Tibetology Publishing House].

Bianzheng Gonglun《边政公论》*(Review of Frontier Administration), Volume 1* (1948), Nanjing: 正中书局 [Chinese Books].

Cai Wenmei, Liu Yi, and Sun Rongjun 蔡文媚、刘义、孙荣军, 1992, "西藏人口婚姻的婚姻家庭特点" [Characters of Marriages and Families in Tibetan Population] Sun Jingxin 孙竞新, ed.《当代中国西藏人口》[*Tibetan Population in Current China*]. Beijing: 中国藏学出版社 [China Tibetology Publishing House], pp. 167–179.

Census Division of State Statistical Bureau 国家统计局人口普查司, 1986a,《中华人民共和国1953年人口普查资料》[*The 1953 Population Survey Data of the PRC*], Beijing: 国家统计局人口司 [Census Division of State Statistical Bureau].

Census Division of State Statistical Bureau 国家统计局人口普查司, 1986b,《中华人民共和国第二次人口普查资料》[*The Second Census Data of the PRC*], Beijing: 国家统计局人口司 [Census Division of State Statistical Bureau].

Census Office of the TAR (COT) 西藏自治区人口普查办公室, 1983a–e,《西藏自治区第三次人口普查资料》[*The Third Census Data of the Tibet Autonomous Region*], Volume 1–5, Lhasa: 西藏人民出版社 [People's Press of Tibet].

Census Office of the TAR(COT) 西藏自治区人口普查办公室, 1992a–d,《西藏自治区1990年人口普查资料》[*The 1990 Census Data of the Tibet Autonomous Region*], Volume 1–4, Lhasa: 西藏人民出版社 [People's Press of Tibet].

Census Office of the TAR (COT) 西藏自治区人口普查办公室, 2002a–d,《西藏自治区2000年人口普查资料》[*The 2000 Census Data of the Tibet Autonomous Region*], Volume 1–4, Lhasa: 中国统计出版社 [China Statistics Press].

Chen Jianfu 陈健夫, 1937,《西藏问题》[*Issues on Tibet*], Shanghai: 商务印书馆 [Trade Press].

Chen Qingying 陈庆英, 1995,《藏族部落制度研究》[*Studies of Tibetan Tribe Systems*], Beijing: 中国藏学出版社 [China Tibetology Publishing House].

Chen Xunzhou 陈汛舟, 1990, "略论历史上川西北地区的藏汉贸易" [On Han-Tibetan Trade in Northwestern Sichuan in History], 《中国藏学》[*Tibetan Studies in China*], 1990 (3): 68–80.

Chen Xunzhou, et. al. 陈汛舟、陈一石, 1988. "滇藏贸易历史初探" [Studies on Yunnan-Tibet Trade], 《西藏研究》[*Tibet Studies*], 1988 (4): 51–58.

Chen Yan 陈言, 1959, 《西藏人民革命》[*The People's Revolution in Tibet*], Hong Kong: 自由出版社 [Free Press].

China Population Information and Research Center (CPIRC) 中国人口信息研究中心, eds., 1991, 《中国第四次全国人口普查数据》[*China's 4th National Population Census Data Sheet*]. Beijing: 中国人口情报与研究中心 [CPIRC].

CTRC (China Tibetology Research Center) 中国藏学研究中心, et al., ed. 1992, 《西藏山南基巧和乃东琼结社会历史调查资料》[*Social and Historical Survey Data in Chikyap, Lhoka and Chongye, Nedong*], *Tibet*, Beijing: 中国藏学出版社 [China Tibetology Publishing House].

Da Losang Namgyal and Fang Lingming 大罗桑朗杰、房灵敏, 1992, "西藏数学教育的特点、问题与发展对策初探" [Characters, Problems, and Development Strategies of Mathematics Education in Tibet], 《西藏研究》[*Tibetan Studies*], 1992 (2): 62–66.

Department of Population, Social, Science and technology Statistics of National Bureau of Statistics of PRC and Department of Economic and Development of State Ethnic Affairs Commission 国家统计局人口与社会科技统计司、国家民委经济发展司, eds., 2003, 《2000年人口普查中国民族人口资料》[Tabulation on Nationalities of 2000 Population Census of China], Beijing: The Ethnic Publishing House [民族出版社].

Development and Planning Committee of Lhasa Urban District 拉萨城关区计划发展委员会, ed., 2005, 《拉萨城关区经济统计汇编》[*Statistical Yearbook of Lhasa Urban District (2004)*], Lhasa: 拉萨城关区发展与计划委员会 [Development and Planning Committee of Lhasa Urban District].

Dong Zhiyong 董志勇, 1993, "关于印茶入藏问题" [On Imported Indian Tea in Tibet], 《中国藏学》[*Tibetan Studies in China*], 1993 (3): 69–80.

Dorji Tseden and Gyaltsen Norbu 多杰才旦、江村罗布, eds., 1995, 《西藏经济简史》[*The Brief Economic History of Tibet*]. Beijing: 中国藏学出版社 [China Tibetology Publishing House].

Dorji Tseden 多杰才旦, 1991, 《西藏的教育》[*Education in Tibet*], Beijing: 中国藏学出版社 [China Tibetology Publishing House].

Dungkal Losang Trinley 东嘎•洛桑赤列, 2001, 《论西藏政教合一制度》[*On Tibetan Regime of Combining Administration and Religion*], Beijing: 中国藏学出版社 [China Tibetology Publishing House].

Economic and development Dept., State ethnic Affairs Commission and Dept. of Integrated Statistics, State Statistical Bureau, PRC, 国家民委经济司、国家统计局国民经济综合统计司, ed. 1991–1998, 《中国民族统计》[*Statistics of Ethnic Minorities in China*] (1991)–(1998). Beijing: 中国统计出版社 [China Statistics Press].

Economic and development Dept., State ethnic Affairs Commission and Dept. of Integrated Statistics, State Statistical Bureau, PRC, 国家民委经济发展司、国家统计局国民经济综合统计司, eds. 2007, 《中国民族统计年鉴》(2006) [*China's Ethnic Statistical Yearbook] (2006)*, Beijing: 民族出版社 [Ethnic Publishing House].

Editorial Committee of the TAR Chronicles 西藏自治区地方志编纂委员会 ed., 2005, *The TAR Chronicles (Education),* 《西藏自治区志•教育志》, Beijing: 中国藏学出版社 [China Tibetology Publishing House].

Editorial Group of *Chinese Educational Yearbook*《中国教育年鉴》编辑部, ed., 1991–1999, 《中国教育年鉴》[*Chinese Educational Yearbook*] *(1991)–(1999),* Beijing: 人民教育出版社 [People's Press of Education].

Editorial Group of *Education in Tibet*《西藏教育》编辑部, 1989, "西藏教育历史回顾" [Historical Review of Education in Tibet], Geng Jisheng and Wang Xihong 耿金声、王锡宏, eds.,《西藏教育研究》[*Studies of Tibetan Education*], Beijing: 中央民族学院出版社 [Press of Central College of Minority Nationalities], pp. 129–143.

Editorial Group of *General Situation of Guangxi Zhuang Autonomous Region*《广西壮族自治区概况》编写组, 1985,《广西壮族自治区概况》[*General Situation of Guangxi Zhuang Autonomous Region*], Nanning: 广西民族出版社 [The Ethnic Publishing House of Guangxin].

Editorial Group of *General Situation of Ngawa Tibetan Autonomous Prefecture*《阿坝藏族自治州概况》编写组, 1985,《阿坝藏族自治州概况》[*General Situation of Ngawa Tibetan Autonomous Prefecture*], Chengdu: 四川民族出版社 [The Ethnic Publishing House of Sichuan].

Editing Group of General Situation of Tianzhu Tibetan Autonomous County《天祝藏族自治县概况》编写组, 1986,《天祝藏族自治县概况》[General Situation of Tianzhu Tibetan Autonomous County], Lanzhou: 甘肃民族出版社 [Nationality Press of Gansu].

Editorial Group of General Situation of Tso chang Mongolian-Tibetan-Kasak Autonomous Prefecture《海西蒙古族藏族哈萨克族自治州概况》编写组, 1985,《海西蒙古族藏族哈萨克族自治州概况》[*General Situation of Tso chang Mongolian-Tibetan-Kasak Autonomous Prefecture*], Xining: 青海人民出版社 [People's Press of Qinghai].

Engels, F. 1850, "德国农民战争" [Peasant War in Germany],《马克思恩格斯全集》[Collection of Marx-Engels], Volume 7, Beijing: 人民出版社 [People's Press], pp. 383–483.

Fang Jianchang 房建昌, 1988, "西藏的回族和他们的清真寺：伊斯兰教在西藏的传播与影响" [Hui in Tibet and Their Temples: Spread of Islam in Tibet and its Impact],《西藏研究》[*Tibet Studies*], 1988 (4): 102–114.

Fei Xiaotong 费孝通, 1989, "中华民族的多元一体格局" [The Pattern of Pluralistic Unity of the Chinese Nation],《北京大学学报》[*Journal of Peking University*], 1989 (4): 1–19.

Fu Chonglan 傅崇兰, ed. 1994,《拉萨史》[*A History of Lhasa*], Beijing: 中国社会科学出版社 [Chinese Press of Social Sciences].

Ge Jing and Qu Lina 葛婧、曲立娜, 2007, "拉萨出租车行业流动人口调查" [A Survey on Temporary Workers in Taxi Services in Lhasa],《西北民族研究》[*N.W. Ethno-National Studies*], 2007 (1): 75–107.

Gelek 格勒, et al., 1993,《藏北牧民：西藏那曲地区社会历史调查》[*Nomads in Northern Tibet: Social and Historical Survey in Nagchu Prefecture, Tibet*]. Beijing: 中国藏学出版社 [China Tibetology Publishing House].

General Situation of Tianzhu Tibetan Autonomous County《天祝藏族自治县概况》编辑组, 1986,《天祝藏族自治县概况》[*General Situation of Tianzhu Tibetan Autonomous County*], Lanzhou: 甘肃民族出版社 [Nationality Press of Gansu].

Geng Jisheng and Wang Xihong 耿金声、王锡宏, eds., 1989,《西藏教育研究》*Studies of Tibetan Education*, Beijing: 中央民族学院出版社 [Press of Central College of Minority Nationalities].

Gu Xiaorong and Gong Sulan 顾效荣、宫素兰, 1989, "西藏教育发展刍议" [On Educational Development in Tibet], in Geng Jisheng and Wang Xihong 耿金声、王锡宏, eds.,《西藏教育研究》[*Studies of Tibetan Education*], Beijing: 中央民族学院出版社 [Press of Central College of Minority Nationalities], pp. 219–232.

Gyaltsen Tseten 江才次旦, 2000, "兄弟共妻家庭的结构和生态变迁" [Structure of Fraternal Polyandry Families and their Ecological Dynamics],《西藏研究》[*Tibet Studies*], 2000 (3): 9–22.

He Longqun 何龙群, 1994, "周恩来与广西民族地区的发展" [Zhou Enlai and Development of Guangxi Minority Areas],《周恩来百周年纪念论文集》, [Collection of Papers in Memory of Zhou Enlai 100 Anniversary], 中央文献出版社 [Central Publishing House of Documents], http://cpc.people.com.cn/GB/69112/75843/75873/5168515.html

Hong Dichen 洪涤尘, 1936,《西藏史地大纲》[*History and Geography of Tibet*], Nanjing: 正中书局 [Zhengzhong Press].

Hou Yangfang 侯杨方, 2001,《中国人口史》[*Population History of China*] *(1910–1953*), Shanghai: 复旦大学出版社 [Fudan University Press].

Huang Fensheng 黄奋生, 1985,《藏族史略》[*History of Tibetan Ethnic Group*], Beijing: 民族出版社 [The Ethnic Publishing House].

Huang Rongqing and Sonam Panjor 黄荣清、索南班觉, 1992, "西藏人口死亡分析" [Analysis of Deaths of Tibetan Population], in Sun Jingxin 孙竞新, ed.《当代中国西藏人口》[*Tibetan Population in Current China*], Beijing: 中国藏学出版社 [China Tibetology Publishing House], pp. 326–348.

Huang Rongqing 黄荣清, et al, 2004,《中国90年代少数民族人口变迁》[*Population Changes among Chinese Ethnic Groups during 1990s*], Beijing: 民族出版社 [The Ethnic Publishing House].

Huang Wangun 黄万纶, 1988, "元明清时期西藏与中央政府的经济关系" [Economic Relationship between Tibet and the Central Government during Yuan, Ming, and Qing Dynasties],《西藏研究》[*Tibet Studies*], 1988 (3): 8–17.

Huang Wangun 黄万纶, 1982, "英俄对藏经济侵略的历史考察" [Historical Studies on British and Russian Economic Invasions in Tibet],《西藏研究》[*Tibet Studies*], 1982 (2): 40–52.

Huang Wangun 黄万纶, 1984, "西藏民主改革的几个问题" [Several Essays in Democratic Reform in Tibet],《西藏研究》[*Tibet Studies*], 1984 (4): 5–20.

Huang Wangun 黄万纶, ed. 1986,《西藏经济概论》[*A General Analysis of Tibetan Economy*], Lhasa: 西藏人民出版社 [People's Press of Tibet].

Jampa Phuntso 向巴平错, ed. 2005,《西藏自治区志・教育志》[*Chronicles of the Tibet Autonomous Region, — Chronicles of Education*], Beijing: 中国藏学出版社 [China Tibetology Publishing House].

Jin Wei 靳薇, 2008,《援助政策与西藏经济发展》[*Subsidization Policy and Its Impact on Economic Development in the TAR*], (Ph.D dissertation, Peking University).

Jin Shulan and Zhang Wubing, 晋淑兰、张武冰 eds., 2002,《新编实用中国地图册》[*The Applied Map of China*, new edition], Beijing: 中国地图出版社 [China Map Press].

Kuang Haolin 况浩林, 1990, "当代西藏的寺庙教育" [Monastic Education in Modern Tibet],《中国社会科学》[*Social Sciences in China*], 1990 (3): 133–153.

Lai Cunli 赖存理, 1986, "藏族智力开发之我见" [Development of Mental Potentials of Tibetans],《西藏研究》[*Tibet Studies*], 1986 (4): 39–48.

Lei Yongsheng et al, 雷永生等, 2007, "西藏中小学校'双语态度'个案调查" [A Case study of Attitude Towards Bilingual Education in Primary and Middle schools in Tibet], Zhang Tingfang 张廷芳, ed.,《西藏少数民族汉语教学论文选编》[Collection on *Putonghua Teaching in the Tibet Autonomous Region*], Beijing: 中国藏学出版社 [China Tibetology Publishing House], pp. 191–203.

Lhapa Phuntso 拉巴平措，et al. eds., 1984,《西藏自治区概况》[*General Situation of the Tibet Autonomous Region*], Lhasa: 西藏人民出版社 [People's Press of Tibet].

Lhasa Census Office 拉萨市人口普查办公室, 2002,《拉萨市2000年人口普查资料》[2000 Census Data of Lhasa City], Tongcheng: 安徽省桐城市印刷厂 [Printing Company of Tongcheng].

Li Anzhai 李安宅, 1946, "西康德格之历史与人口" [History and Population of Tibetans in Dege],《边政公论》[*On Frontiers*], Volume 5, No. 2.

Li Guangwen, et al, 李光文、杨松、格勒, eds. 2000,《西藏昌都：历史、传统、现代化》[*Chamdo of Tibet: History, Tradition, and Modernization*], Chongqing: 重庆出版社 [Chongqing Press].

Li Li 李鲤, 1989, "1986、1987 年西藏人口迁移分析" [Analysis of Population Migration in Tibet in 1986 and 1987",《中国人口科学》[*Population Science in China*], 1989 (5): 20–24.

Li Weihan 李维汉, 1962, "中国各少数民族和民族关系" [Ethnic Minorities and Ethnic Relations in China],《中国民族关系史论文集》（上集）[*Collected Works of History of Ethnic Relations in China*] (1982), Beijing: 民族出版社 [The Ethnic Publishing House], pp. 99–119.

Li Weihan 李维汉, 1981,《统一战线与少数民族》[*United Front and Ethnic Nationalities*]. Beijing: 人民出版社 [People's Press].

Li Yankai 李延恺, 1989a, "历史上的藏族教育概述" [Tibetan Education in History], Geng Jinsheng and Wang Xihong 耿金声、王锡宏, eds.,《西藏教育研究》[*Studies of Tibetan Education*], Beijing: 中央民族学院出版社 [Central College of Minority Nationalities], pp. 349–360.

Li Yankai 李延恺, 1989b, "清朝治理青海藏区方略论" [Strategies of the Qing Domination in Qinghai Tibetan Areas],《藏学研究论丛》[*Series of Tibetan Studies*], Volume 1, Lhasa: 西藏人民出版社 [People's Press of Tibet], pp. 88–103.

Li Zhichun 李志纯, et al. 1984,《草地藏族调查材料》[*The Research Materials of Grassland Tibetans*], Chengdu: 西南民族学院民族研究所 [The Institute of Ethnic Minorities at Southwestern College of Minority Nationalities].

Li Zhuqing 李竹青, 1990,《西藏经济的发展与对策》[*Development and Strategies of Tibetan Economy*], Beijing: 民族出版社 [The Ethnic Publishing House].

Lin Junhua 林俊华, 1995, "社会主义新时期藏传佛教工作研究" [Studies of Tibetan Buddhism in New Period of Socialism],《西藏研究》[*Tibetan Studies*], 1995 (2): 17–22.

Liu Huru 刘虎如, ed. 1931,《青海西康两省》[*Two Provinces of Qinghai and Xikang*], Shanghai: 商务印书馆 [Trade Press].

Liu Qinghui 刘庆慧, 1985, "西藏民族教育事业的创办和发展" [Creation and Development of Tibetan Education],《西藏研究》[*Tibetan Studies*], 1985 (3): 28–33.

Liu Rui 刘瑞, ed., 1988,《中国人口：西藏分册》[*China's Population: Tibet Volume*]. Beijing: 中国财政经济出版社 [Chinese Press of Finance and Economy].

Liu Yuanchao 刘援朝, 1999, "族际交往中的语言文字和社会环境" [Use of Languages and Communication Environment of Inter-group Interaction], Ma Rong and Zhou Xing 马戎、周星, eds.《中华民族凝聚力形成与发展》[Formation and Development of Chinese Multi-Ethnic Unite], Beijing: 北京大学出版社 [Peking University Press], pp. 255–330.

Lu Aiguo 路爱国, 2005, "农区基础教育调查报告" [A Report of Rural Education], Wang Luolin and Zhu Ling 王洛林、朱玲主编, eds.《市场化与基层公共服务——西藏案例研究》[Marketlization and Public Services: A Case of TAR] Beijing: 民族出版社 [The Ethnic Publishing House], pp. 207–270.

Lu Changlin 陆长林, 1999, "昌都一夫多妻和一妻多夫婚姻的原因与策略" [The Reasons and Strategies of Polygamy and Polyandry Marriages in Chamdo], 《西藏研究》[*Tibetan Studies*], 1999 (4): 54–58.

Lu Liandi 陆莲蒂, 1986, "藏族" [The Tibetans], in Yan Ruxian, 严汝娴 ed. 《中国少数民族婚姻家庭》[*Marriages and Families of Ethnic Minorities in China*], Beijing: 中国妇女出版社 [Chinese Women Press].

Lu Zijian 鲁子健, 1990, "清代藏汉边茶贸易新探" [New Study of Border Trade between Tibetan and Han Regions in the Qing Dynasty], 《中国藏学》[*Tibetan Studies in China*], 1990 (3): 36–54.

Ma Hetian 马鹤天, 1947a–c, 《甘青藏边区考察记》[*Visiting to Frontier Regions in Gansu, Qinghai and Tibet*], Volumes 1–2, Shanghai: 商务印书馆 [Trade Press].

Ma Rong 马戎, 1989, "人口迁移的主要原因和实现迁移的条件：内蒙古赤峰迁移调查" [Main Reasons and Conditions for Migration: Migration Studies in Chifeng], 《中国人口科学》[*Population Science in China*], 1989 (2): 46–55.

Ma Rong 马戎, 1990a, "拉萨市区汉藏民族之间社会交往的条件" [Residential Patterns of Han and Tibetans in Lhasa, the Tibet Autonomous Region], 《社会学研究》[*Sociological Studies*], 1990 (3): 57–65.

Ma Rong 马戎, 1990b, "小城镇的发展与中国的现代化" [The Development of Small Towns and China's Modernization], 《中国社会科学》[*Social Sciences in China*], 1990 (4): 131–146.

Ma Rong 马戎, 1993a, "导言" [Introduction], Pan Naigu and Ma Rong, 潘乃谷、马戎 eds., 《边区开发论著》[*On Development of Frontiers*], Beijing: 北京大学出版社 [Peking University Press], pp. 1–26.

Ma Rong 马戎, 1993b, "西藏的经济形态及其对区域间人口迁移的影响" [Economic Patterns in Tibet and Its Impact on Interregional Migration], 《西北民族研究》[*N.W. Ethno-National Studies*], 1993 (1): 7–48.

Ma Rong 马戎, 1996a, 《西藏的人口与社会》[*Population and Society in Tibet*], Beijing: 同心出版社 [Tongxin Press].

Ma Rong 马戎, 1996b, "体制变革、人口流动与文化融合：一个草原牧业社区的历史变迁" [System Reform, Migration and Cultural integration], Pan Naigu and Ma Rong 潘乃谷、马戎, eds. 《社区研究与社会发展》[*Community Study and Social Development*], Tianjin: 天津人民出版社 [People's Press of Tianjin], pp. 531–594.

Ma Rong 马戎, 2001, 《民族与社会发展》[Ethnicity and Social Development], Beijing: 民族出版社 [The Ethnic Publishing House].

Ma Rong and Ma Xuefeng 马戎、马雪峰, 2007, "西部六城市流动人口调查综合报告" [The Survey Reports of Temporary Migration in Six Cities], 《西北民族研究》[*N.W. Ethno-National Studies*], 2007 (3): 135–175.

Ma Rong and Pan Naigu 马戎、潘乃谷, 1988a, "解放以来我国藏族人口的数量变化及其地理分布" ["Changes of Size and Geographic Distribution of Tibetan Population in China since 1949], 《中国人口科学》[*Population Science in China*], 1988 (2): 78–98.

Ma Rong and Pan Naigu 马戎、潘乃谷, 1988b, "赤峰农村牧区蒙汉通婚的研究" [Han-Mongolian Intermarriage Patterns in Rural Chifeng, Inner Mongolia], 《北京大学学报》[*Journal of Peking University*], 1988 (3): 67–75.

Ma Rong and Pan Naigu 马戎、潘乃谷, 1989, "居住形式、社会交往与蒙汉民族关系" [Residential Patterns, Social Communications, and the Relationship between the Han and Mongolians in Chifeng, Inner Mongolia], 《中国社会科学》[*Social Sciences in China*], 1990 (3): 179–192.

Ma Rong and Tanzen Lhundup 马戎、旦增伦珠, 2006,"拉萨市流动人口调查报告" [Temporary Migrants in Lhasa City],《西北民族研究》[*N.W. Ethno-National Studies*] 2006 (4): 124–171.

Ma Rong 马戎, et al., 2005,"新疆乌鲁木齐市流动人口的结构特征与就业状况"[The structure and employment of temporary migrants in Urumqi, Xinjiang],《西北民族研究》[*N.W. Ethno-National Studies*] 2005 (3): 5–42.

Ma Yin 马寅，ed., 1981,《中国少数民族》[*Minority Nationalities in China*], Beijing: 人民出版社 [People's Press].

Nakane Chie 中根千枝, 1992,"西藏的贵族"（译自1985年东京出版的《东洋文化研究所纪要》第87册）[Nobles in Tibet],《国外藏学研究译文集》[*Translated Papers of Tibetan Studies abroad*], Volume 9, Lhasa: 西藏人民出版社 [People's Press of Tibet], pp. 336–388.

Ou Chaoquan 欧潮泉, 1988, "论藏族的一妻多夫" [On Polyandry in Tibet], 《西藏研究》 [*Tibetan Studies*], 1988 (2): 78–88.

Party History Material Collection Committee of the TAR 西藏自治区党史资料征集委员会, 1995,《中共西藏党史大事记》（1949–1994）[*Chronicle of CCP in the TAR: 1949–1994*], Lhasa: 西藏人民出版社 [People's Press of the TAR].

Planning Commission of Lhasa Urban District 拉萨城关区计委, 1990,《第四次人口普查摘要》[*The Fourth Census Summary*]. Lhasa: 拉萨城关区计划委员会 [Planning Commission of Lhasa Urban District].

Population Census Office of State Council (PCOSC) 国务院人口普查办公室、国家统计局人口统计司, 2002a, 2002b, 2002c,《中华人民共和国2000年人口普查数据》[*Tabulation on the 2000 Population Census of the PRC*] *Vol. 1, Vo. 2, Vol. 3*. Beijing: 中国统计出版社 [China Statistics Press].

Population Census Office of Statistical Bureau of China (SBC) 国家统计局人口普查办公室, ed., 1982,《第三次人口普查主要数据》[*The Major Figures of the Third Census*], Beijing: 中国统计出版社 [China Statistics Press].

Population Information and Research Center of China (PIRC) 国务院人口普查办公室、国家统计局人口统计司, ed., 1993,《1990年人口普查数据》[*The Population Data Sheet of the 1990 Census*], Beijing: 中国统计出版社 [China Statistics Press].

Postiglione, Gerard, Ben Jiao, and Ngawang Tsering, 白杰瑞，班觉和阿旺次仁, 2010,"学生眼中的内地西藏班（校）"[Tibetans Student Perspectives about *Neidi* Schools], 马戎 [Ma Rong], ed.《发展中的西藏社会》[The Tibetan Society in Developing Process, Beijing: 民族出版社 [The Ethnic Publishing House]. (forth coming)

Qiao Yuanzhong, et al. 乔元忠等, 2002,《全国支援西藏》[Whole Country support Tibet], Lhasa: 西藏人民出版社 [People's Press of Tibet].

Research Group of the State Council 国务院研究室课题组, 2006,《中国农民工调研报告》*[A Research Report on Farmer-labor in China]*, Beijing: 中国言实出版社 [China Yanshi Press].

Research Group of the TAR Education Commission 自治区教委双语教育调研组, 2007,"我区双语教学的基本现状及对策研究"[The situation of Bilingual Education in the TAR and Policy Studies], Zhang Tingfang 张廷芳, ed.,《西藏少数民族汉语教学论文选编》[Collection on *Putonghua Teaching in the Tibet Autonomous Region*], Beijing: 中国藏学出版社 [China Tibetology Publishing House], pp. 33–40.

Seng-ge and Ma Baolong 僧格、马宝龙, 2007,"格尔木市流动人口"[Survey on Temporary Migration in Gormud City],《西北民族研究》[*N.W. Ethno-National Studies*] 2007 (4): 106–132.

Shang Jiali 尚佳莉. 1989, “西藏土地承载能力研究” [Study on Bearing Capacity of Land in Tibet],《西藏研究》[*Tibetan Studies*], 1989 (2): 5–15.

Shen Tsung-lien and Liu Shengqi 沈宗濂、柳升祺, 2006,《西藏与西藏人》[*Tibet and the Tibetans*], Beijing: 中国藏学出版社 [China Tibetology Publishing House] (its English version was published by Stanford Univ. Press in 1953).

Sichuan Editorial Group 四川编辑组, ed. 1985a,《四川省阿坝州藏族社会历史调查》[*Social and Historical Survey of Ngawa Tibetan Autonomous Prefecture in Sichuan*], Chengdu: 四川省社会科学院出版社 [Sichuan Press of Social Sciences].

Sichuan Editorial Group 四川编辑组, ed. 1985b,《四川省甘孜州藏族社会历史调查》[*Social and Historical Survey of Kantse Tibetan Autonomous Prefecture in Sichuan*], Chengdu: 四川省社会科学院出版社 [Sichuan Press of Social Sciences].

Song, Naigong 宋乃工, ed. 1987,《中国人口：内蒙古分册》[*China's Population: Inner Mongolia*]. Beijing: 中国财政经济出版社 [Press of Finance and Economy of China].

Statistical Bureau of China (SBC) 国家统计局, ed., 1990,《中国统计年鉴》[*Statistical Yearbook of China*] *(1990)*, Beijing: 中国统计出版社 [China Statistics Press].

Statistical Bureau of Guangxi 广西壮族自治区统计局, ed., 1995–1998,《广西统计年鉴》[*Statistical Yearbook of Guangx*i] (1995)–(1998), Beijing: 中国统计出版社 [China Statistics Press].

Statistical Bureau of Inner Mongolia 内蒙古自治区统计局, ed., 1990,《内蒙古统计年鉴》[*Statistical Yearbook of Inner Mongolia*] *(1990)*, Beijing: 中国统计出版社 [China Statistics Press].

Statistical Bureau of Lhasa 拉萨市统计局, ed. 2005,《拉萨统计年鉴》[*Statistical Yearbook of Lhasa*] *(2004)*, Lhasa: 拉萨统计局 [Statistical Bureau of Lhasa].

Statistical Bureau of Ningxia 宁夏回族自治区统计局, ed., 1995, 《宁夏统计年鉴》[*Statistical Yearbook of Ningxia*] *(1995)*, Beijing: 中国统计出版社 [China Statistics Press].

Statistical Bureau of Tibet (SBT) 西藏自治区统计局, ed. 1985,《西藏经济概况》[*General Economic Situation of Tibet*], Lhasa: 西藏统计局 [Statistical Bureau of Tibet].

Statistical Bureau of Tibet (SBT) 西藏自治区统计局, ed. 1989, 2003, 2008, 2009《西藏统计年鉴》[*Statistical Yearbook of Tibet*] *(1989) (2003) (2008) (2009)*, Beijing: 中国统计出版社 [China Statistics Press].

Statistical Bureau of Xinjiang 新疆维吾尔自治区统计局, ed., 1995, 1999,《新疆统计年鉴》[*Statistical Yearbook of Xinjiang*] (1995) (1999), Beijing: 中国统计出版社 [China Statistics Press].

Stein, Rolf Alfred, 1962,《西藏的文明》[*La Civilisation Tibetaine*] (Chinese translation, 1982), Lhasa: 西藏社会科学院 [Academy of Social Sciences of Tibet].

Study Group of Minority Education Project 少数民族教育课题组, 1989, “西藏教育现状与对策：西藏教育调查报告” [The Situation of Education in Tibet and Strategy: A Report of Survey in Tibet], Geng Jisheng and Wang Xihong, eds.,《西藏教育研究》*Studies of Tibetan Education*, Beijing: 中央民族学院出版社 [Press of Central College of Minority Nationalities], pp. 27–49.

Sun Huaiyang and Cheng Xianmin 孙怀阳、程贤敏, eds., 1999,《中国藏族人口与社会》[*Tibetan Population and Society in China*], Beijing: 中国藏学出版社 [China Tibetology Study Press].

Sun Jingxin 孙竞新, ed., 1992,《当代中国西藏人口》[*Tibetan Population in Current China*], Beijing: 中国藏学出版社 [China Tibetology Publishing House],

Sun Ruoqiong 孙若穷, ed., 1990,《中国少数民族教育学概论》[*General Situation of Minority Education in China*], Beijing: 中国劳动出版社 [Labor Press of China].

Sun Zerong and Wang Daben 孙泽荣、王大奔, 1985,"西藏自治区人口"[Population of the Tibetan Autonomous Region],《中国人口年鉴》[*Almanac of China's Population*] *(1985)*, Beijing: 中国社会科学出版社 [Chinese Press of Social Sciences], pp. 545–553.

Taller, M. 1992,"西方发现西藏史"（上）[History of Western Finding of Tibet],《国外藏学研究译文集》[*Translations of Tibetan Studies in the West*], Volume 9, Lhasa: 西藏社会科学院 [Academy of Social Sciences of Tibet], pp. 389–467.

Tan Fangzi 谭方之, 1940,"滇茶销藏"[Yunnan's Tea Trade to Tibet],《边政公论》[*On Frontiers*], Volume 3, No. 11.

Tanzen and Zhang Xiangming 旦增、张向明, eds., 1991a, 1991b,《当代中国的西藏》[*Tibet in Current China*] (I), (II), Beijing: 当代中国出版社 [Press of Current China].

Tanzen Lhundup 旦增伦珠, 2010, "社会转型与变迁：藏传佛教寺庙典型调查与研究——哲蚌寺" [Social Transition and Changes: A Survey of Drepung Monastery], Ma Rong 马戎主编,《西藏社会发展研究》[*Studies of Tibetan Society development*], Beijing: 民族出版社 [The Ethnic Publishing House].

The TAR government 西藏自治区政府, 1994, "西藏自治区实施《中华人民共和国义务教育法》方法" [Implementation Methods of the Compulsory Education Law of the PRC in the TAR],《西藏教育》[*Education in Tibet*] 1994 (3): 2–5.

The Institute of Minority Education Science of Tibet Autonomous Region 西藏自治区少数民族教育科学研究所, ed., 1989, "建立西藏的藏语教学体系" [Establishing Educational System with Tibetan as Teaching Language in Tibet], Geng Jisheng and Wang Xihong 耿金声、王锡宏, eds., 1989,《西藏教育研究》[*Studies of Tibetan Education*], Beijing: 中央民族学院出版社 [Press of Central College of Minority Nationalities], pp. 290–306.

The Institute of Sociology and Anthropology & the China Tibetology Research Center, 北京大学社会学人类学研究所、中国藏学研究中心 eds. 1997,《西藏社会发展研究》[*Development Studies of Tibet Society*], Beijing: 中国藏学出版社 [China Tibetology Publishing House].

Tibet Research Group of Education Study Project of Ethnic Minorities 民族教育课题组赴藏调查组, 1989, "西藏教育现状与对策：西藏教育调查报告" [The Situation of Education in Tibet and the Policy: Report of Education in Tibet], Geng Jisheng and Wang Xihong 耿金声、王锡宏, eds., 1989,《西藏教育研究》*Studies of Tibetan Education*, Beijing: 中央民族学院出版社 [Press of Central College of Minority Nationalities], pp. 27–49.

Tibet Social and Historical Survey Series Editing Group (TSHSSEG) 西藏社会历史调查资料丛刊编辑组, 1987a, 1987b, 1987c,《藏族社会历史调查》[*Historical Survey of Tibetan Society*], Volumes 1, 2, and 3, Lhasa: 西藏人民出版社 [People's Press of Tibet].

Tibet Social and Historical Survey Series Editing Group (TSHSSEG) 西藏社会历史调查资料丛刊编辑组, 1988a, 1988b, 1988c,《藏族社会历史调查》[*Historical Survey of Tibetan Society*], Volumes 4, 5, and 6, Lhasa: 西藏人民出版社 [People's Press of Tibet].

Trering Yangdzom 次仁央宗, 2006,《西藏贵族世家》[*The Aristocratic Families in Tibetan History*], *1900–1951*, Beijing: 中国藏学出版社 [China Tibetology Publishing House].

Trinley Chodrak 赤烈曲扎, 1985,《西藏风土志》[*The Natural Conditions and Social Customs in Tibet*]. Lhasa: 西藏人民出版社 [People's Press of Tibet].

Tsewang Junme 次旺俊美, 2007,"西藏民族教育基本情况及其发展问题"[Minority Education and Its Development in Tibet], Zhang Tingfang 张廷芳, ed.,《西藏少数民族汉语教学论文选编》[Collection on *Putonghua Teaching in the Tibet Autonomous Region*], Beijing: 中国藏学出版社 [China Tibetology Publishing House], pp. 1–10.

Wang Daben, Chen Hua and Sonam Rinchen 王大奔、陈华、索朗仁青, 1993, "西藏藏族妇女的婚姻与生育" [Tibetan Women's Marriages and Childbearing in Tibet] Zhang Tianlu 张天路, ed.,《中国少数民族社区人口研究》[*Population Studies of Ethnic Minority Communities in China*], Beijing: 中国人口出版社 [Population Press of China], pp. 40–49.

Wangdu 旺堆, 1995, "西藏教育发展中的若干关系初探" ["Several Relations in Educational Development in Tibet], 《西藏研究》[*Tibetan Studies*], 1995 (1): 67–73.

Wang Ke and Wu Yiping 王克、吴怡平, 1982, "论民主改革前藏族人口增长缓慢的诸原因" [The Reasons for Slow Growth of Tibetan Population before Democratic Reform], 《西藏研究》[*Tibetan Studies*], 1982 (2): 58–64.

Wang Lixong 王力雄, 1998,《天葬》[*Sky Burial: The Fate of Tibet*], Hong Kong: 明镜出版社 [Mirror Books Ltd].

Wang Sen 王森, 1984,《西藏佛教发展史略》[*History of Buddhist Development in Tibet*], Beijing: 中国社会科学出版社 [Press of Chinese Social Sciences].

Wang Wenchang 王文昌, 2000, "东部藏区婚姻结构的经济分析" [Economic Analysis of Tibetan Marriage Structures in the Eastern Tibet],《西藏研究》[*Tibetan Studies*], 2000 (2): 56–60.

Wang Xiaoqiang and Bai Nanfeng 王小强、白南风, 1986,《富饶的贫困》[*Poverty of the Rich*], Chengdu: 四川人民出版社 [People's Press of Sichuan].

Wu Congzhong 吴从众, ed. 1991,《西藏封建农奴制研究论文选》[*Collected Papers of Studies of Feudal Serfdom System in Tibet*], Beijing: 中国藏学出版社 [China Tibetology Publishing House].

Wu Degang 吴德刚, 1995,《中国西藏教育改革与发展的理论研究》[*The Theoretical Study of Education Reform and Development in Tibet, China*], Kunming: 云南教育出版社 [Yunnan Education Press].

Wu Degang 吴德刚, 2005a,《西藏教育研究》[*A Study on Education in Tibet*], Beijing: 中共中央党校出版社 [Press of Central School of Chinese Communist Party].

Wu Degang 吴德刚, 2005b,《西藏教育调查》[*A Survey on Education in Tibet*], Beijing: 中共中央党校出版社 [Press of Central School of Chinese Communist Party].

Wu Jianhua, Dong Rongqing and Yang Shuzhang 武建华、董荣清、杨书章, 1992, "西藏自治区人口状况分析" [Analysis of Population in the Tibet Autonomous Region], Sun Jingxin 孙竞新, ed.《当代中国西藏人口》[*Tibetan Population in Current China*]. Beijing: 中国藏学出版社 [China Tibetology Publishing House].

Wu Wen 吴文, 1984, "略述木里藏族婚姻与家庭问题" [Tibetan Marriages and Families in Muli],《人口研究》[*Population Studies*], 1984 (4): 40–46.

Wu Zhongxin 吴忠信, 1953,《西藏纪要》[*Summary of Mission to Tibet*]. Taipei: 中央文物出版社 [Central Antique Press].

Xie Qihuang and Sun Ruoqiong 谢启晃、孙若穷, eds., 1991,《中国民族教育发展战略抉择》[*Development Strategies of Minority Education in China*], Beijing: 中央民族学院出版社 [Press of Central College of Minority Nationalities].

Xing Haining 邢海宁, 1994,《果洛藏族社会》[*Tibetan Society in Golog*], Beijing: 中国藏学出版社 [China Tibetology Publishing House].

Xu Ming 徐铭, 1989, "1729–1953年甘孜藏族人口研究" [Tibetan Population Study in Kantse (1729–1953)],《藏学研究论丛》[*Series of Tibetan Studies*], Volume 1, pp. 279–291.

Xu Zhengyu 徐正余, 1992,《西藏科技人才》[*Science and Technology Professionals in Tibet*]. Lhasa: 西藏人民出版社 [People's Press of Tibet].

Ya Hanzhang 牙含章, 1991, “试论西藏封建农奴制度” [On Feudal Serfdom in Tibet], Wu Congzhong 吴从众, ed. 1991,《西藏封建农奴制研究论文选》[*Collected Papers of Studies of Feudal Serfdom System in Tibet*], Beijing: 中国藏学出版社 [China Tibetology Publishing House], pp. 48–80.

Yan Ruxian 严汝娴, ed. 1986,《中国少数民族婚姻家庭》*Marriages and Families of Ethnic Minorities in China*, Beijing: 中国妇女出版社 [Chinese Women Press].

Yang Shengying 杨生寅, 1989, “西藏高等教育民族特色初探” [Ethnic Characters of High Education in Tibet] Geng Jinsheng and Wang Xihong 耿金声、王锡宏,eds.,《西藏教育研究》, Beijing: 中央民族学院出版社 [Press of Central College of Minority Nationalities], pp. 144–168.

Yang Xiaojun and Liu Kai 杨小峻、刘凯，2008,《西藏高等教育研究》[*A Study of High Education in Tibet*], Lhasa: 西藏人民出版社 [Peoples' Press of Tibet].

Yu Yonggui, Wen Deming, and Jingpa Yarphel 俞允贵、文德明、金巴杨培, 1994,《西藏产业论》[*On Industries in Tibet*], Beijing: 中国藏学出版社 [China Tibetology Publishing House].

Zhang Husheng 张虎生, 1990, “试论西藏的寺院教育” [On Monastic Education in Tibet],《藏学研究论丛》[*Series of Tibetan Studies*], Volume 2, pp. 458–478.

Zhang Husheng 张虎生, 1993, “全国支援西藏办教育” [The Whole Nation is Supporting Tibet to development Education],《中国西藏》[*Tibet in China*], 1993 (4): 39–52.

Zhang Quanwu 张权武, 1986, “西藏农牧区近几年离婚率升高因素试析” [The Analysis of Rising Divorce Rate in Rural Areas in Tibet],《西藏研究》[*Tibetan Studies*], 1986 (4): 110–120.

Zhang Tianlu 张天路, 1989,《西藏人口的变迁》[*Changes in Tibetan Population*], Beijing: 中国藏学出版社 [China Tibetology Publishing House].

Zhang Tingfang 张廷芳, ed., 2007,《西藏少数民族汉语教学概况与研究》[*Putonghua Teaching in the Tibet Autonomous Region*], Beijing: 中国藏学出版社 [China Tibetology Publishing House].

Zhang Yuxin 张羽新, 1983, “清代前期西藏地区地方经济长期停滞落后的原因” [Main Reasons for the Long-term Underdeveloped Economy in Tibet During the Early Qing Dynasty],《西藏研究》[*Tibetan Studies*], 1983 (2): 32–36.

Zhou Benjia 周本加, 1985, “西藏民主改革前的寺庙经济” [Monastery Economy before Democratic Reform in Tibet],《西藏研究》[*Tibetan Studies*], 1985 (2): 39–50.

Zhou Wei and Kelzang Gyaltsen 周炜、格桑坚村, eds. 2004,《西藏的藏语文工作》[*Tibetan Language Work in the TAR*], Beijing: 中国藏学出版社 [China Tibetology Publishing House].

Zhou Wei 周炜, 2003,《西藏的语言与社会》[*Tibetan Language and Society*], Beijing: 中国藏学出版社 [China Tibetology Publishing House].

Zhou Zhenhe 周振鹤, 1938,《青海》[*Qinghai*], Shanghai: 商务印书馆 [Trade Press].

Zhu Jielin 朱解琳, 1989, “黄教寺院教育” [Monastic Education of Yellow Hat], Geng Jisheng and Wang Xihong 耿金声、王锡宏, eds.,《西藏教育研究》[*Studies of Tibetan Education*], Beijing: 中央民族学院出版社 [Press of Central College of Minority Nationalities], pp. 395–413.

Zhu Jielin 朱解琳, 1990,《藏族近现代教育史略》[*History of Tibetan Education in Modern Period*], Xining: 青海人民出版社 [People's Press of Qinghai].

Zhuang Yongfu 庄永福, 1990, “略析西藏个体工商户的发展及对策” [On Development of Private Manufacture and Trade Enterprises in Tibet],《西藏研究》[*Tibetan Studies*], 1990 (3): 23–34.

References (in English):

Abeysekera, Dayalal S. D. J., 1984, "Rural to Rural Migration in Sri Lanka", C. Goldscheider, ed., *Rural Migration in Developing Nations*, Boulder: Westview Press, pp. 109–207.

Ashton, Basil, et al., "Famine in China, 1958–61", Dudley L. Poston and David Yaukey, eds., *The Population of Modern China*, New York: Plenum Press, pp. 225–271.

Asian Watch Committee, ed. 1988a, *Human Rights in Tibet* (An Asian Watch Report, February, 1988), Washington, DC.: Asian Watch Committee.

Asian Watch Committee, ed. 1988b, *Evading Scrutiny: Violations of Human Rights in Tibet* (Supplement to the Asian Watch on Human Rights in Tibet, July, 1988), Washington, DC.: Asian Watch Committee.

Asian Watch Committee, 1990, *Merciless Repression: Human Rights in Tibet* (An Asian Watch Report, May, 1990), Washington, DC.: Asian Watch Committee.

Avendon, J. F. 1984, *In Exile from the Land of Snows,* New York: Alfred A. Knopf.

Aziz, Barbara N. 1978, *Tibetan Frontier Families*, New Delhi: Vikas Publishing House.

Bangsbo, Ellen 2004, *Teaching and Learning in Tibet*, Copenhagen: NIAS Press.

Banister, Judith, 1987, *China's Changing Population*, Stanford: Stanford University Press.

Bass, Catriona, 1990, *Inside the Treasure House,* London: Victor Gollancz.

Bass, Catriona, 1998, *Education in Tibet: Policy and Practice since 1950*. London: Zed Books.

Bell, Charles, 1928, *The People of Tibet*. Oxford: the Clarendon Press.

Bell, Charles. 1946, *Portrait of the Dalai Lama,* London: Collins.

Ben Jiao, 2001, *Socio-economic and Cultural Factors Underlying the Contemporary Revival of Fraternal Polyandry in Tibet* (Ph.D dissertation, Case Western Reserve University, USA).

Bista, Dor Bahadur, 1979, *Report From Lhasa*. Kathmandu: Sahayogi Press.

Connor, Walker 1984*, The National Question in Marxist-Leninist Theory and Strategy,* Princeton: Princeton University Press.

Dalai Lama XIV, 1962, *My Land and My People: The Autobiography of His Holiness the Dalai Lama*, New York: Dutton.

De Jong, G. F. and J. T. Fawcett 1981, "Motivations for Migration: An Assessment and a Value-Expectancy Research Model*,"* G.F. De Jong and R.W. Garder eds., *Migration Decision Making*. New York: Pergamon Press, pp. 13–58.

Dreyer, June Teufel 1976, *China's Forty Millions*. Cambridge: Harvard University Press.

Dreyer, June Teufel 1981, "China and Tibet: A Review of 30 year research", (a paper presented at the 33rd Annual Conference of Asia Research Association, March 1981).

Engels, F. 1884, *The Origin of Family, Private Property, and the State* (English version), London: Laurence and Wishalt.

Epstein, I. 1983, *Tibet Transformed,* Beijing: New World Press.

Evans, Peter 1979, *Dependent Development*, Princeton: Princeton University Press.

Findley, Sally 1977, *Planning for Internal Migration*, ISP-RD-4, Washington: U.S. Government Printing Office.

Fischer, Andrew Martin 2005, *State Growth and Social Exclusion in Tibet*, Copenhagen: NIAS Press.

Fletcher, J. 1978, "Ch'ing Inner Asia, C.1800", J. K. Fairbank, ed. *The Cambridge History of China*, Vol. 10, Cambridge: Cambridge University Press, pp. 35–106.

Gersovitz, J. ed. 1983, *Selected Economic Writings of W. Arthur Lewis*, New York: New York University Press.

Ginsburgs G. and M. Mathos, 1964, *Communist China and Tibet: The First Dozen Years*. Martinus Nijhoff: The Hague.

Glazer, N. and D. P. Moynihan, 1970, *Beyond the Melting Pot,* (2nd edition), Cambridge: the M. I. T. Press.

Glazer, N. and D. P. Moynihan, eds., 1975, *Ethnicity*, Cambridge: Harvard University Press.

Goode, W. J. 1982, *The Family* (second edition), New Jersey: Prentice-Hall Inc.

Goldlust, J. and A. Richmond, 1974, "A Multivariate Model of Immigrant Adaptation", *International Migration Review* 8 (Summer): 193–226.

Goldstein, M. C. 1971, "Stratification, Polyandry, and Family Structure in Central Tibet", *Southwestern Journal of Anthropology,* Volume 27, pp. 64–74.

Goldstein, M. C. 1978, "Pahari and Tibetan Polyandry Revisited," *Ethnology*, 17 (3): 325–327.

Goldstein, M. C. 1987, "When Brothers Share a Wife," *Natural History* 96 (3): 39–49.

Goldstein, M. C. 1989a, *A History of Modern Tibet (1913–1951*), Berkeley: University of California Press.

Goldstein, M. C. 1989b, "The Impact of China's Reform Policy on Pastoral Areas of Tibet". *Asian Review,* (June, 1989): 619–641.

Goldstein, M. C. 1997, *The Snow Lion and the Dragon: China, Tibet, and the Dalai Lama*. Berkeley: University of California Press.

Goldstein, M. C. and C. M. Beall, 1990, *Nomads of Western Tibet: the Survival of Way of Life*. Berkeley: University of California Press.

Goldstein, M. C. and C. M. Beall, 1991, "China's Birth Control Policy in the Tibet Autonomous Region: Myths and Realities", *Asian Survey*, Vol. XXXI, No. 3 (March 1991): 285–303.

Goldstein, M. C. Ben Jiao, C. M. Beall, and Phuntsog Tsering 2002, "Fertility and Family Planning in Rural Tibet", *China Journal* No. 47 (January 2002): 19–39.

Goldstein, M. C. Ben Jiao, C. M. Beall, and Phuntsog Tsering 2006, "Development and Change in Rural Tibet: Problems and Adaptations', Barry Sautman and June T. Dreyer, eds. *Contemporary Tibet*. New York: M. E. Sharpe, pp. 193–213.

Goldstein, M. C. and M. T. Kapstein, eds. 1998, *Buddhism in Contemporary Tibet*, Berkeley: University of California Press.

Goldstein, M. C., William Siebenschuh, and Tashi Tsering, 1999, *The Struggle for Modern Tibet: The Autobiography of Tashi Tsering*, New York: M. E. Sharpe.

Gordon, M. 1964, *Assimilation in American Life*, Cambridge: Harvard University Press.

Grunfeld, A.Tom 1987, *The Making of Modern Tibet*. New York: M. E. Sharpe Inc.

Grunfeld, A.Tom 1996, *The Making of Modern Tibet* (revised version), New York: M. E. Sharpe Inc.

Hansen, N. et al., 1990, *Regional Policy in a Changing World*, New York: Plenum Press.

Hechter, Michael 1975, *Internal Colonialism*, Berkeley: University of California Press.

Herter, M. 1981, *Families in Transition: Cross-cultural Perspectives*, New York: Free Press.

Horowitz, Donald L. 1985, *Ethnic Groups in Conflict*. Berkeley: University of California Press.

Jetsun Pema, 1997, *Tibet: My Story, an Autobiography*, Rockpot, Mass: Element.

Johnassen, C. J. 1960, "Contributions of Sociology to Marketing", *Journal of Marketing*, Volume 24.

Kapstein, Matthew T. 2006. *The Tibetans*, Oxford: Blackwell Publishing.

Karan, P. P. 1976, *The Changing Face of Tibet*, Lexington: the University Press of Kentucky.

Klieger, P. Christiaan, 2006. "Riding High on the Manchurian Dream: Three Paradigms in the Construction of the Tibetan Question", Barry Sautman and June Teufel Dreyer, eds. *Contemporary Tibet*, New York: M. E. Sharpe, pp. 214–229.

Kolb, A. 1971, “Geography of Eastern Asia: China, Japan, Korea and Viet Nam Cultural Regions”, Collection of Papers presented at C. A. M. Conference. London: Methnen.

Levine, Nancy E. 1988, *The Dynamics of Polyandry*, Chicago: University of Chicago Press.

Levine, Nancy E. 1994, “The Demise of Marriage in Purang, Tibet, 1959–1990”, Per Kvaerne, ed. *Tibetan Studies* Volume 1, Oslo: The Institute for Comparative Research in Human Culture, pp. 468–480.

Li, Hanlin and Wang Qi, 1996, *Research on the Chinese Work Unit Society*, New York: Peter Lang.

Luhman, R. and S. Gilman, 1980, *Race and Ethnic Relations*. Belmont: Wardsworth Publishing Company.

Ma, Rong, 1987, *Migrant and Ethnic Integration in Rural Chifeng, Inner Mongolia, China*. (unpublished Ph.D. dissertation at Brown Univ.)

Ma, Rong, 1991, “Han and Tibetan Residential Patterns in Lhasa”, *The China Quarterly*, No. 128 (1991 Dec.): 814–835.

Ma, Rong, 1995, “Economic Patterns, Migration, and Ethnic Relationships in the Tibetan Autonomous Region, China”, Calvin Goldscheider, ed., *Population, Ethnicity, and Nation-Building*, Boulder: Westview Press, pp. 37–75.

Ma, Rong, 1998, “Economic Patterns of the Tibet Autonomous Region”, G. E. Clarke, ed., *Development, Society and Environment in Tibet*, Wien: Verlag der Osterreichischen Akademie der Wissenschaften, pp. 167–186.

Mackerras, Colin, 2003, *China's Ethnic Minorities and Globalization*, New York: Routledge Curzon.

MacInnis, D. E. 1989, *Religion in China Today*, New York: Orbis books.

Murdock, G. P. 1969, *Ethnographic Atlas*, Pittsburgh: Pittsburgh University Press.

Nagata, J. 1981, “In Defense of Ethnic Boundaries: the Changing Myths and Charters of Malay Identity”, C. F. Keyes, ed. *Ethnic Change*. Seattle: University of Washington Press, pp. 87–116.

Parmar, Y. S. 1975, *Polyandry in the Himalayas*, New Delhi: Vikas Publishing House.

Petech, Luciano. 1973, *Aristocracy and Government in Tibet 1728–1959*, Roma: Istituto Per Il Medio ed Estremo Oriente.

Peter, Prince of Greece and Denmark, 1963, *A Study of Polyandry*, The Hague: Mouton.

Poston, Dudley. L. Jr. and David Yaukey, eds., 1992, *The Population of Modern China*, New York: Plenum Press.

Poston, Dudley. L. Jr. and Shu Jing, 1992, “The Demographic and Socioeconomic Composition of China's Ethnic Minorities”, D. L. Poston and David Yaukey, eds., *The Population of Modern China*, New York: Plenum Press, pp. 573–600.

Postiglione, Gerard 1999, “Introduction: State Schooling and Ethnicity in China”, Gerard A. Postiglione, ed. *China's National Minority Education*, New York: Falmer Press, pp. 3–19.

Pye, L. W. 1975, “China: Ethnic Minorities and National Security,” N. Glazer and D. P. Moynihan, eds. *Ethnicity*. Cambridge: Harvard University Press, pp. 489–512.

Richardson, Hugh E. 1962, *A Short History of Tibet*, New York: Oxford University Press.

Richardson, Hugh E. 1984, *Tibet and Its History*, Boulder, Colorado: Shambhala Publications.

Samuelson, P. A. and W. D. Nordhaus, 1998, *Economics* (16th edition), New York: McGraw-Hill.

Sautmen, Barry, 1999, “Expanding Access to Higher education for China's National Minorities: Policies of Preferential Admission”, Gerard A. Postiglione ed. *China's National Minority Education*, New York: Falmer Press, pp. 173–210.

Sautmen, Barry and Irene Eng, 2001, "Tibet: Development for Whom?" *China Information* 15 (2): 20–74.

Sautman, Barry and June Teufel Dreyer, eds. 2006, *Contemporary Tibet*, New York: M. E. Sharpe.

Sarat Chandra Das, 1970, *Journey to Lhasa and Central Tibet*, New Delhi: Manjusri Publishing House.

Shannon, L. W. 1973, *Minority Migrants in Urban Communities*, Beverly Hills: Sage Publication.

Shaw, R. P. 1975, *Migration: Theory and Fact*. Bibliography series No. 5, Philadelphia: Regional Science Research Institute.

Shen, Tsung-Lien, and Liu, Shen-Chi, 1953, *Tibet and the Tibetans*, Stanford: Stanford University Press.

Simmons, A. B. 1981, "A Review and Evaluation of Attempts to Constrain Migration to Selected Urban Centers and Regions", *Population Distribution Policies in Development Planning* (Population Studies, No. 75), New York: United Nations.

Simpson, G. E. and J. M. Yinger, 1985, *Racial and Cultural Minorities* (fifth edition). New York: Plenum Press.

Smelser, N. J. 1963, *The Sociology of Economic Life*, New York: Prentice-Hall.

Smith, Anthony, 1991, *National Identity,* London: University of Nevada Press.

Sullivan, T. 1978, "Racial-Ethnic Differences in Labor Force Participation: A Ethnic Stratification Perspective", F. D. Bean and W. P. Frisbie eds. *Demography of Racial and Ethnic Groups,* New York: Academic Press, pp. 165–187.

Taeuber, K. 1980, "Negro Residential Segregation: Trends and Measurement", T. F. Pettigrew ed. *The Sociology of Race Relations*, New York: The Free Press, pp. 280–286.

Taeuber, K. E. and A. F. Taeuber, 1965, *Negroes in Cities*. Chicago: Aldine Publishing Company.

Taring, Zasak. 1984, *Map of Lhasa,* Tokyo: University of Tokyo Press.

Tessler, M. A. 1978, "Ethnic Change and Nonassimilating Minority Status: Jews in Tunisia and Morocco and Arabs in Israel", C. F. Keyes, ed. *Ethnic Change*. Seattle: University of Washington Press, pp. 154–197.

Tien H. Yuan, 1985, *Family Planning in China*, Ohio State Univ. Press.

Todaro, M. P. 1985, *Economic Development in the Third World* (3rd edition), London: Longman.

Tsering Yangdzom, 2006, *The Aristocratic Families in Tibetans History 1900–1951*, Beijing: China Intercontinental Press.

Tsurumi, Kazuko, 1992, "A Theory of Endogenous Development with Reference to Japan", Chie Nakane and Chien Chiao eds. *Home Bound: Studies in East Asian Society*. Hong Kong: The Centre for East Asian Cultural Studies.

Upton, Janet L. 1999, "The Development of Modern School-Based Tibetan Language Education in the PRC", Gerard A. Postiglione, ed. *China's National Minority Education*, New York: Falmer Press, pp. 281–339.

Weber, M. 1963, *The Sociology of Religion,* Boston: Beacon Press.

Wilson, F. D. and K. E. Taeuber, 1978, "Residential and School Segregation: Some Tests of Their Association", F. D. Bean and W. P. Frisbie eds. *Demography of Racial and Ethnic Groups,* New York: Academic Press, pp. 51–78.

World Almanac and Encyclopedia (1898) to (1904), New York: The Press Publishing Co. the New York World.

The World Bank, 1991, *World Development Report 1990,* Oxford: Oxford University Press.

Yeh, Emily Ting 2006, "Critical Approaches to Tibet's Socioeconomic Transformation: The Case of Peri-Urban Vegetable Farming in Lhasa", a paper presented at the international conference on "The Socio-economic and Environment Situation in Contemporary Tibet" at Harvard University, February 3–5, 2006.

Zanden, J. W. V. 1983, *American Minority Relationship* (fourth edition), New York: Alfred A. Knopf Press.

Zhu, Zhiyong, 2007, *State Schooling and Ethnic Identity: The Politics of a Tibetan Neidi Secondary School in China*, New York: Lexington Books.

Glossary of Terms

English	**Chinese-Putonghua**	**Tibetan**
Tre-ba	差巴	ཁྲལ་པ་
Du-jung	堆穷	དུད་ཆུང་
Nangsan	囊生	ནང་ཟན་
Amban	驻藏大臣	ཨམ་བན་
Kashag government	噶厦政府	བཀའ་ཤག་སྲིད་གཞུང་
Geshe	格西	དགེ་བཤེས་
Shika	谿卡	གཞིས་ཀ་
Dzong	宗	རྫོང་
Khe	克（度量单位）	ཁེ་
Kham	康区	ཁམས་

Amdo	安多	ཨ་མདོ་
Lhasa	拉萨	ལྷ་ས་
Shigatse	日喀则	གཞིས་ཀ་རྩེ་
Lhoka	山南	ལྷོ་ཁ་
Dalai Lama	达赖喇嘛	ཏཱ་ལའི་བླ་མ་
Penchan Lama	班禅喇嘛	པཎ་ཆེན་བླ་མ་
Tashilhunpo	札什伦布寺	བཀྲ་ཤིས་ལྷུན་པོ་དགོན་
Tu-si	土司	ཀྲུལ་པོ་
Bon	本教	བོན་པོ་
Gelugpa	格鲁派	དགེ་ལུགས་པ་
Sakya	萨迦派	ས་སྐྱ་པ་
Kargyu	噶举派	བཀའ་བརྒྱུད་པ་
Nyingma	宁玛派	རྙིང་མ་པ་
Kadam	噶当派	བཀའ་གདམས་པ་
Mahayana (Sutras)	显宗	མདོ་རྒྱུད་
Vajranana (Mantras)	密宗	སྔགས་རྒྱུད་
Drepung	哲蚌寺	འབྲས་སྤུངས་དགོན་
Sela	色拉寺	སེ་ར་དགོན་
Ganden	甘丹寺	དགའ་ལྡན་དགོན་
Sumo	素莫（婚姻）	ཟུར་མོ་

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